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THE MICHIGAN FARMER.

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JOHNSTONE & DUNCKLEE.

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Willow Culture.

Many of our subscribers are desirous of obtaining information on the subject of willow culture; and in the absence of communications from those who are engaged in that business in our own State, we select the instructions and illustrations embodied in the following remarks from the writings of Mr. Charles Downing, of Newburgh, N. Y., and of Mr. Saul, of Washington, D. C. which have been published in different numbers of the Horticulturist.

The soil invariably recommended as most suitable for the successful cultivation of the osier willow must combine the three qualities of depth, richness and moisture. Deep, rich bottom lands that are occasionally overflowed make excellent osier plantations; but even heavy soils, if deeply worked, though in elevated situations, will do well. Downing says, "Natural meadow, composed of a mixture of vegetable and earthy matter, not so adhesive as to be difficult of tillage—such as in very favorable seasons might give a rampant crop of corn, but would oftener fail and be given over to buckwheat—with a stream running through by which it might occasionally be overflowed, would be my ideal of an osier field."

He also recommends that grounds which are never overflowed should have a little stable manure deeply worked in before planting, and at intervals of four or five years afterwards to prevent deterioration. In this way, if kept clean from weeds a plantation will increase in productiveness for many years.

The number of cuttings to be set on an acre vary according to the end to be accomplished, ranging from ten to thirty thousand. For large plantations, the best number is probably twelve to fifteen thousand, and not much crop looked for until the end of the second season, and some even prefer to take no crop for market until the end of the third season, when one of great value may be had. In such case, twelve thousand would be the proper number. A crop of considerable value may be had the second season; and for this purpose perhaps fifteen thousand would be chosen. These would be set in rows about three

feet apart, and about ten inches distant, in the rows. To derive the most pleasure and profit immediate and prospective, from one acre, the plan adopted on the islands of the Thames, or on the borders of the Cam and Trent, would be the one to pursue. The rows should be eighteen inches apart, and the plants ten inches apart in the rows. If the ground is well prepared, and the culture such as it should be, a very beautiful crop may be had, of considerable value, the first year. For this purpose not more than two shoots must be suffered to grow from a set the first season. At the end of the sixth year, alternate stools are to be dug up, leaving the rows eighteen inches apart, and the stools twenty inches distant in the rows. In favorable situations, and where cuttings may be had at very cheap rates, this is undoubtedly the most advantageous mode, and at once makes a field that the eye delights to rest upon.

The cuttings should be prepared in fall or early winter; and if planted in the fall, the ends will form the callosity preparatory to sending out roots. But this advantage is generally more than counterbalanced by their liability to be thrown out by frost, so that spring planting is on the whole to be recommended.

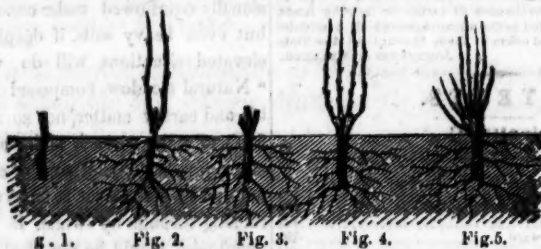
In setting, a small portion only should remain above ground; and the depth to which they should be inserted depends much upon the character of the soil—a light, pervious soil receiving with advantage to a depth that in a very retentive soil would be disadvantageous. The most vigorous growth will be

obtained when the strongest roots start from the lower end of the set; and setting so deep that the end does not vegetate, causes a degree of inactivity through the whole plant.

It should be remarked, by the way, that cuttings of vigorous upland growth, that have had an abundance of room, make more vigorous and healthy plantations than those taken from osier holts; and that the wood of one year's growth, with a portion of two year's wood for the lower extremity, make the best of all.

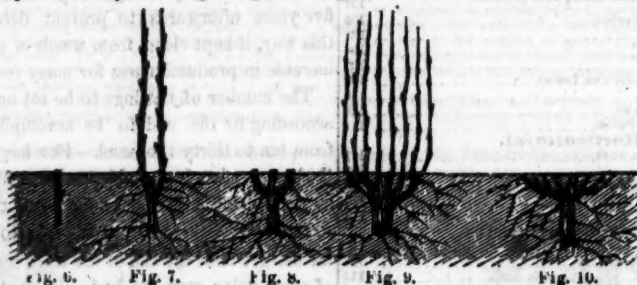
The length of cuttings may vary from seven to fourteen inches for osier; but for fencing purposes, from eight inches to as many feet, according to the plan adopted.

Willow sets, as commonly planted, would have the appearance of fig. 1. It will be perceived that one eye is above the ground, and more frequently there are two. At the end of the first summer's growth, it has the appearance of fig. 2. These we will suppose, are cut back, as shown at fig. 3*. It will be seen that a "snag" is left on the old stem, which will increase at all subsequent cuttings leaving a short stem of it, perhaps a few inches, between them and the surface of the ground. At the end of the second year, we have a plant like fig. 4; and at the end of the third year like fig. 5. At this, and subsequent ages, many of the "stools" will be getting one-sided, from the breaking off of "snags" by carelessness or accident; and when the stools stand close together, many shoots will



be weak and worthless. This is a very bad system of cutting, yet in England it is the general one. A much better system is practiced by a few good growers.

When the cutting is planted, it has the appearance of fig. 6—the top bud level with the surface of the ground. It will be found that the shoots given the



first summer, as shown at fig. 7, will be much stronger than that shown at fig. 2. The reason is obvious: as soon as the shoots fairly commence growing, roots are emitted at the base of the pushing buds, which,

being near the surface, greatly assist their growth. When these are cut back, it must be done close to the surface of the ground, as seen at fig. 8. The next summer the stools will give a luxuriant growth of

"rods," as at fig. 9, showing a great contrast to stools of the same age, as fig. 4. Persons unacquainted with Willow-growing must not think this overdrawn, as I can answer for it; the contrast in the Willow beds will be still greater than on paper. Little explanation is necessary on this point. The rods given by a stool like fig. 4 have to draw all their nourishment through the stem, and will, as a consequence, be weak in contrast with those given by a stool like fig. 9. Where the whole stool, to the very top, is in the ground, roots are emitted from every point, and the stools swell accordingly; and when growth commences in spring, shoots will be thrown up all around the stool, from the under side of the headed down branches. These shoots springing out of the soil, as soon as fairly growing, also emit roots in every direction, from the point of junction with the previous year's wood. It will be clearly seen, under circumstances such as these—a stool from which roots ramify in every direction, with the young rods rooting into the soil as well—the rods must, as a consequence, be of superior growth to the other system. From the system of cutting back, the stool spreads to a considerable distance; three feet in diameter will soon be common in a good soil and under a good culture. I have seen them much wider. The rods having more distance, and deriving the same nourishment from the parent stool, are not only long, but uniform in size. If cut on the other system, many weak shoots will be given, for want of room, air, nourishment, &c. This system of cutting close to the ground must be adhered to at all subsequent cuttings. It will be plainly seen, that under this mode, the stools must be planted at a considerable distance apart,—on no account should they be closer than three feet each way; three and a half feet will be a better distance; and on favorable soil, with the very strongest Willows, four feet each way will not be too much.

* It is much better not to head them back until the end of the second year, as it is easily ascertained the stools. Many good growers occasionally let their old plantations stand two years, to give them greater vigor.

Hints to Breeders of Horses.

MR. EDITOR:—There are but few principles relative to the management of a farm more important than that of breeding animals. A farmer may increase his expenses for improved varieties of seed, and for correct methods of improving the fertility of the soil, to great advantage and profit; but not more so than by a judicious improvement of his stock. If that is neglected, he is not only deprived of a large profit in his operations, but is losing a great pleasure, by not having the *best* to indulge and gratify his fancy.

At this season of the year, the matter of selecting the proper kind of horses to breed from is of vast importance, and by many is too much neglected. Farmers, generally, are content with what they call a strong horse; their fine appearance and action is of

little consequence to them; and in breeding colts the price of the services of the sire is the governing principle, and the exemption from travel is the next consideration. We all acknowledge that a horse of *beauty* is worth, in market, at least \$25 more than one of homely figure. Add to beauty, *superior action* and *long endurance*, and \$25 more is enhanced to his value; then if the horse possesses *extra speed*, \$75 more may be added to the price. Now let us see how the matter would figure up:

Value of ordinary colt at four years old,	\$75
Keeping colt 4 years, \$60; horse services, \$4,	64
Profit,	\$11
Value of colt with <i>beauty</i> ,	\$100
Keeping, \$60; horse, \$6;	66
Profit,	\$34
Value of colt with <i>beauty, action and bottom</i> ,	\$125
Keeping, \$60; horse, \$10;	70
Profit,	\$55
Value of colt with <i>extra speed and beauty</i> ,	\$200
Keeping, \$60; horse, \$20;	80
Profit,	\$120

The above may be considered visionary by some, but still, there is more certainty in that calculation, for profit, than in buying a lottery ticket, with a "splendid scheme," for the order of nature is, that "like begets like."

It is well for farmers to select and own the breeding horse, either individually or by company, and he may be made useful during the whole year. Never breed from an ordinary horse, if a superior one can be obtained,—let your object be to breed the best market horses—and you will always have the *best* work horses, if you know how to use them.

The same argument will forcibly apply to the breeding of cattle; for the whole breed of a county may be changed in ten years, by the introduction of a fine animal in each town, (a short-horn is best in my estimation, of course, but every one to his notion,) and fully one hundred per cent. added to the value of the stock, where such animals are introduced and patronized.

Sheep, hogs, and poultry, come within the same principle, but my favorite animal, the horse, is that to which, at this time, I wish to draw attention.

A. Y. MOORE.

Schoolcraft, March 13 1855.

On Planting Orchards.

BY LINUS COLE, OF TROY.

Not long since a farmer in one of the interior counties of this State applied to me to obtain some instruction relative to fitting the ground and transplanting fruit trees for an orchard, with the request that I would answer through the *Farmer* or by letter. Now although I could point him to far better authority on this subject, still I feel no disposition to decline making a few suggestions, based upon my own

experience, which I will do, Mr. Editor, by your permission, through your columns.

In doing so I may touch upon some points to which the enquirers above referred to do not relate, but which are essential, and should always be taken into consideration in planting an orchard.

There is one important omission in the letter before me, and one that often occurs in enquiries of this kind, whether they are made privately or through our horticultural journals; and that is in not stating the character of the soil and subsoil on which the writer intends to operate. It is true he says his farm is of that class of land called "Timbered Openings," but still it may be a light dry soil, with an open porous subsoil, or it may be like that of my own, a wet stiff clayey soil, with a subsoil that will hold water like a dish. It will be obvious to all that soils of such an opposite character would require different treatment to fit them for any kind of fruit trees. The first would require no drainage, while the latter would have to be deeply and thoroughly drained before trees could be planted with a prospect of success.

In selecting trees there are many things to be taken into consideration, and among the most prominent are that the varieties are good bearers, and adapted to both soil and climate. The selection to be such as to furnish ripe apples in succession for the use of the family the year round, and the remainder suited to the market where they are to be disposed of. If that market is near, and some member of the family has a taste for peddling, then a large proportion of summer fruit would be preferable.

But if a distant market is to be sought, late keeping winter fruit would be found most profitable. There is another essential point to be attended to in the selection of varieties, and that is, if it is the intention to neglect the trees after planting, as most farmers do, select those that will bear passable fruit when left to take care of themselves.

The first thing to be done in preparing the ground is to make it dry, both soil and subsoil, if it is not already so. Then make it deep, fine and rich; the deeper it is made the better. If it is inconvenient to prepare the whole as above, prepare a strip eight or ten feet wide for the rows. Or if neither of the above methods are adopted, dig holes a foot and a half, or two feet deep for each tree, and then fill in to the proper height with co-pest or good rich soil. But in no case will it do to plant trees in holes of the above description on a compact subsoil, unless the surface is quite uneven. There must be a chance for water to pass off from the bottom of the hole, or the trees will be destroyed.

Composts for filling in around trees can be prepared in various ways, but the manure used in such composts must be thoroughly rotted, and be made fine; and it should also be intimately intermixed with a proportion of soil before it is used.

"Swamp muck alone" will not do, although there is a great difference in what is called swamp muck. That taken from small basins where it has been covered with water most of the time is an excellent manure for fruit trees, and as it is mainly composed of decayed vegetation it can be applied without further trouble. But it is too strong of itself to be used in filling in around trees.

Muck taken from our swamps and marshes is mostly of a peaty, spongy character, and it therefore takes a long time to decompose it to fit it for use. This too, like the other, will require an addition of soil before it can be used with safety.

But after trying several kinds of composts I have come to the conclusion that what is equally good, and much easier to be obtained, is to take some good new fine soil from some rich spot on the farm, and use that alone for filling the whole space around the tree.

It is of the utmost importance that the roots of trees are kept moist from the time they are taken from the ground, until again placed in it, and that the trees and roots are placed as nearly as they were before they were removed as possible, with the moist earth pressed firmly around them. And then to finish the operation mulch to the depth of 4 or 5 inches with half rotten straw, partially rotted sawdust, or rotten wood, to keep the earth moist, and your trees will live and grow, and you will be fully remunerated for all your labors.

LEWIS CORNELL

Troy, March 8th.

How to Raise Barley.

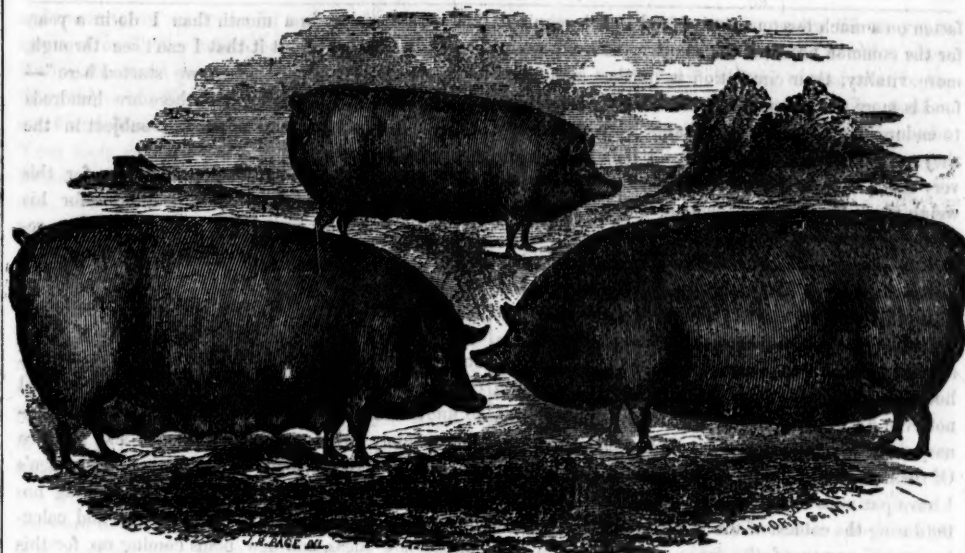
EDITOR OF FARMER: I notice an inquiry of J. S. C., of Mt. Clemens, in regard to barley sowed on sward-land. I have seen it tried in this county, with about the same result, on a rich, black loam, partly mixed with sand and gravel. I think from some cause or other barley will not grow on sward land; but I have raised a first rate crop of barley this season, although it has been very dry, in the following manner:

One year ago last spring, I manured a piece of sward-land pretty thoroughly, and then ploughed it about eight inches deep and planted with corn, and got a very good crop. Last spring I plowed the same land very early, and sowed it with barley; then put on the roller, and about fifty pounds of plaster to the acre. I think the roller is very beneficial, it causing the land to retain moisture longer than it otherwise would. I have this fall plowed my corn ground, and intend to sow barley in the spring, and cultivate it in.

The great difficulty, in my opinion, in raising barley in this State, are the drouths that we have been subjected to for several years past. I think that if J. S. C. will follow the course that I have pointed out, he will not fail of raising good barley, or even oats.

J. M. LA RUE.

Peterson, Livingston co., Mich., Dec., 1864.



AUNT ORION.

TOPSEY.

FISHER HOBBS.

IMPROVED ESSEX SWINE,

OWNED BY LEWIS G. MORRIS, OF MOUNT FORDHAM, WESTCHESTER COUNTY, NEW YORK.

We present to our readers the above beautiful engraving of portraits of three of the Essex breed of swine, which have been bred by the celebrated New York breeder and importer of fine English stock, Lewis G. Morris, of Mount Fordham, New York. Those who visited the State Fair last fall, will recollect that among the pens of swine which were exhibited, Mr. Tibbitts, of Plymouth, had a few pair of this breed, which he had entered for competition. These which he had were of the same stock as the portraits above given, Mr. Tibbitts having procured his swine from Mr. Morris. Much inquiry was made at the State Fair whether these hogs could withstand the cold winters of this latitude; their thin skin and the absence of bristles, or any hairy protection, suggesting that it was altogether probable they were of a delicate constitution. When we last saw Mr. Tibbitts, which was in the early part of the present winter, we asked him how he found these hogs to withstand the cold season, and he said so far as his experience went, they appeared to suffer less than the common breeds of hogs. But he said their good qualities were not yet tested sufficiently in this State for him to speak positively on the subject. He gave us to understand, however, that for quickness of growth, and readiness to fatten, as well as for docility and thriving with little care, he had found them a very superior kind of swine. He gave us to understand that he would furnish us with some of his practical knowledge of these animals at an early date. If this breed of hogs have withstood the rigors of the past winter, there need not be many doubts felt to their strength of constitution.

In the above engraving the fine points of these hogs are very plainly to be seen. Just look at the smallness of the head, the fineness of the snout and the ears, the smallness of the shoulder compared with the size of the body, and the delicacy of the limbs; then notice the length and depth of flank both in the sow and the boar, and lastly admire the comparatively large size of the most valuable part of the hog—the ham. It is in these particular points, as well as in capacity to fatten quick, that the claims of superiority are founded by the breeders of this excellent variety, the Improved Essex.

In the January number of the *Farmer* for 1854 there will be found a notice of this breed, and also some particular points in its history.

The following communication was received from Mr. Tibbitts in time to accompany the above article. As he is the only breeder of this variety that we know of in the State, it will be read with interest.

PLYMOUTH, March 13, 1855.

R. F. JOHNSTONE, DEAR SIR:—Yours of the 8th inst. was received yesterday, and I hasten to give you the desired information respecting the Essex improved breed of hogs.

This valuable breed of swine had its origin with the late Lord Western, of Essex. It was derived from a cross with the Neapolitan, from which it inherits its black color. They probably combine more essential and desirable qualities than any other breed. Being very gentle and contented, they are not inclined to wander about and get into mischief. They keep and

fatten on a much less quantity of food than is required for the common breed of the country. They possess more vitality, their circulation is quicker, and their food is more readily assimilated; thus enabling them to endure the rigor of our winters, notwithstanding they are almost entirely destitute of hair. They are very small in the bone and offal, and consequently weigh much heavier than their appearance would indicate. Their flesh is said to be of superior quality, and to command a considerable extra price. As they mature at an early age, they can be fattened at any time after a month old. They are not subject to cutaneous diseases, and their skin always presents a smooth glossy appearance, even when exposed to the hottest sun. Many object to their color, but this is not even "skin deep," for when dressed by the ordinary mode of scalding, they are said to be quite white. Of their ability to endure the severity of our winters, I have put mine sorely to the test, as their only shelter during the coldest of the weather of the late winter, was a corner of the fence, with a few boards thrown over them for a cover.

In this connection, permit me briefly to allude to the improved Suffolk hog, a pair of which I also have. With many this is the favorite breed on account of the color, which is perfectly white. What I have said of Essex will chiefly apply to the Suffolk, with these exceptions: they have considerable more hair, are not quite so symmetrical in their form, and are somewhat smaller. Another characteristic of this breed is they are more inclined to fat, being thus better adapted for barreling purposes, while the Essex are noted for affording the choicest bacon and fresh pork.

The modern improved Suffolk, originated from the ancient Suffolk, crossed with the Chinese and Berkshire. Youatt, Martin, and Rham, give the preference to this breed over all others. Those who wish to make heavy pork for barreling, will probably prefer a larger breed, but for those who wish a quick return from the capital invested, and for crossing with larger breeds, these hogs will be invaluable. To such, I can furnish either the pure bloods, or their crosses, the coming season, at prices which I think will be satisfactory.

Respectfully,

J. H. TIBBITA.

Two Kinds of Farming.

Most farmers think that there is a great secret at the bottom of successful farming; but it is simply because they do not choose to avail themselves of the light which experience and science have shed upon the art of husbandry. It is true, that here is a farmer who gets rich, and his neighbor can't see how he does it. "My farm," says he, "is just as good as John Bookman's; I work harder and more hours, and save every cent, and yet he will get along somehow; takes a host of these farming papers; buys every new fangled tool that he can hear of, and spends more

time with company in a month than I do in a year. There is a mystery about it that I can't see through, for he was poorer than I when we started here"—Thus reflects Mr. Readnone, and there are hundreds of farmers who sermonize upon this subject in the same blindfold manner.

Now, friend Readnone, there are causes for this difference between you and your neighbor—for his rather remarkable prosperity, while you have remained stationary; and we propose to show you frankly what these causes are:

In the first place then, your neighbor, Bookman, has purchased and read nearly every book of value on agricultural subjects,—besides, he takes eleven agricultural papers and reads them. He may be said to know about all that is publicly known of the art—all, certainly, that public experience and practice can impart. By reading the results of other men's experiments, he is encouraged to go on making improvements,—reading, thinking, planning and calculating; new ideas, and new plans coming up for this and that operation. He affirms that one suggestion, relative to keeping a strict debt and credit account with his farm, which he got from one of his papers soon after he began farming, has been worth a thousand dollars to him. He has thus always kept a correct account of every day's labor, and of every thing raised on the farm. He weighs every load of hay, every bushel of grain, and measures every thing not easily weighed, such as beans, potatoes, roots, &c. These latter are measured by the cart, or wagon box.

Now, friend Readnone, you have not a single agricultural work in your house, nor do you take a single paper devoted to your noble profession. You know nothing about the main improvements of the day; you are unacquainted with the advances which agriculture has of late made—of the high position which intelligent men of your profession sustain; so you keep along in the old beaten track, following obsolete practices, and believe in antiquated notions about tillage and book-farming, to your own great disadvantage, you must allow me to say. But to go on:

Bookman stables all his animals, and by gutters and the use of muck and mold as absorbents, he saves both the liquid and solid voidings of his stock, which are carefully preserved under shelter till wanted for use. By this care in saving all the refuse of the farm and house, and by deep plowing, he is able to supply his crops with full quota of nourishment. You let your cattle go unsheltered; feed twice as much as he does per head, because of exposure; make less good manure; every winter lose some of your animals, and you plow shallow and raise light crops. His fences are kept up in order, and his animals kept in; yours, you know are in very bad order, and your cows and swine take to the "long pasture" naturally.

His tools are all of the best kinds that can be had, and you would be amazed now, to see the number

and quantity of really useful and profitable implements of machinery which he has in his tool-house. During the storm yesterday, he was repairing something there, which had been damaged by use. Allow me, friend Readnone, to give a faithful comparison: Your tools, consisting of a plow, harrow, a horse-cultivator, and a few scythes, are never sheltered; and now, your plow and harrow stand in the field where last used; the cultivator is turned up against the fence in the corn-field; a scythe or two hangs in a crotch in the barn-yard. In his tool-house, Mr Bookman has a large quantity of excellent timber, well seasoned, and some plow-beams, wagon-axes and spokes, etc., all nearly finished, so that should a break occur during a hurrying time, it would cause but a slight delay to repair up. You have nothing of the sort; and, if in haying-time, for instance, you break an axle, wagon-body, rake, or pitch-fork handle, you are obliged to start off to get repairs done; lose the work of several hands, perhaps, delay the getting in of your hay till a storm comes on; and worse than all, injure your own mind and feelings by impatience and vexation.

His farm is divided into convenient lots; there is a lane, bordered with two strings of thrifty maples, which affords easy access to every field, and a good, substantial gate, well painted, guards the entrance to each. You are obliged, in passing from one field to another, distant, to pass through the intervening ones by letting down fences, using up a good deal of time and injuring the fences materially. His out-buildings are so arranged, that once within he can do up all his chores without going out, by which convenience he nearly saves the labor of one man. His dwelling is a model of fitness; convenience within, and tasteful, yet plain, without. Scarcely a stump or stone is found upon his cultivated fields; I notice that you were unable to do good work, because of so many of them still upon that old field of yours. He grows the best kind of fruit, and always has a good garden.

Now, friend Readnone, I leave it to you: have I not somewhat cleared up the "mystery" of which you spoke, and satisfactorily explained the causes of difference in the results of your neighbor Bookman's practice?

Reader, here you have our view of two kinds of farming. B.

Notes of a Short Trip Northward.

MESSES. EDITORS:—I herewith send you some notes of a few things I saw on a short trip to the north, and you may put them in the *Farmer* or the fire, as you think best.

The first day of last November I took the so-called stage which runs from this place east toward the capital, which was an old lumber wagon with a piece of canvas drawn over it. However, it was crowded with passengers, and we managed to work our passage, get-

ting out occasionally to rest ourselves till we got to the mouth of Flat River, a distance of 17 miles, where we found a better "car" waiting to take us on to the flourishing village of Ionia, about 18 miles farther, where we stopped at the house of D. Irish, Esq., who keeps a public house that is well worthy the extensive patronage that it receives. The next morning we found another of these mud cars, or stages, waiting to take us to Lansing; (by the way, these stage-cars appear to be borrowed from Kalamazoo, for they have that name gilded on them.) But I trust we shall not be beholden to the Kalamazooites much longer for either stages or railroads, for as soon as the Oakland & Ottawa Railroad is built, which is fast progressing, we shall be independent, and neither borrow nor lend.

At Lansing we were dropped at the Lansing House, kept by H. Jipson, who is another perfect host in the way of catering to the public taste. He is also getting to be quite an extensive farmer; he has 600 acres of the very best of land 2 miles east of Lansing, and he has had 100 acres chopped and cleared, the last season, and 90 of them put into wheat, which looked very fine in the distance as I passed it.

From Lansing I passed "a-foot-back" some nine miles easterly on the plank road to the cedar bridge, thence north-east one mile to the farms of Newton Welch, and John Miller, who settled in here some 8 years ago, and have now got large improvements, and they have got some choice land, too, as there is in the State.

And here permit me to show up an example of diligence and industry to the young men and boys who read the *Farmer*. I have known Mr. Miller ever since he was 16 years old, and at that time he was a poor, fatherless boy, who had to depend upon his own energies and resources for success and prosperity since that time and some years before; and now at the age of only about twice 16 he is worth a property of between two and three thousand dollars.

From this place my business called me to the north east corner of the county, to the farm of Mr. T. A. Harmon, who settled here at an early day, some 12 years ago, when this country was a dark, dreary wilderness, and neighbors very few and far between. Now he has a large improvement, with a good bearing orchard and other conveniences for the comfort and happiness of the farmer. Mr. Harmon is also a subscriber to the *Michigan Farmer*, and likes it very much.

The location of the capital at Lansing and the consequent building of the plank road to Detroit, which runs about 8 miles south of this place, and the prospect of having a railroad some 16 miles north, is causing a very rapid improvement of this country, and bringing up the value of property very fast.

I passed from Mr. Harmon's place in the north east corner of Ingham county, about 6 miles east, to

the farm of Mr. Gains C. Fuller, who has a large farm, under good improvement, on the edge of Livingston county, on the line between it and Shiawassee.

Mr. Fuller is an old settler here, and is a thorough going farmer of the right sort. He has his barns and out buildings arranged on the most commodious plans for his own convenience and the comfort of his stock, of which he has a large number. He had just returned from Ohio, where he had purchased a pair of horses, young and well matched; and also a lot of colts on which he will make large profits. One peculiar feature about his barn is, that it is quite large, with an underground part underneath the whole of it, that is below ground on two sides. Two thirds of this is divided off into three rows of stalls for cattle, and one for horses, running crosswise; the other third was used for a wagon-house and a granary, all arranged with aisles and doors in a very economical manner.

Mr. F. has long been a faithful reader of the *Farmer* and has gained many valuable ideas from its perusal.

From thence I journeyed north west about ten miles where I found Mr. A. W. Calkins, who has just located on a choice piece of plains in the county of Shiawassee, about ten miles north of the flourishing village of Owosso, which is on the line of the Oakland and Ottawa Railroad. Mr. C. has quite a large improvement; he has some of the very best kind of soil to be found in the State, for all kinds of crops, it being a deep rich sand and gravel loam. As he is a man of energy, industry and perseverance, who has a taste for all the improvements of the day, I doubt not that under the smiles of a kind Providence, and with the aid of the *Michigan Farmer*, of which he is a constant reader, he will yet rise to affluence, and become one of the best and most reliable farmers in the State.

From his place, I took occasion to go to the beautiful village of Corunna, some 12 or 15 miles north east, to visit an old friend, Joseph K. Thompson, who sold a farm of 160 acres in Oakland county, about three years ago for \$2800, and bought 400 acres of land about a mile and a half from this village, on the line of the Railroad, for \$2100, and two years after he was offered \$6000 for his bargain. He, too, has laid a foundation to become one of the most substantial farmers in the State. He has a large family of children of both sexes, some of whom are already young men and women; all of whom manifest a strong desire, and have a great thirst for knowledge, which is powerful, and for which they are having great advantages to obtain, compared with what young people had in this State a few years ago.

I also had the pleasure of calling on Judge Thompson, who lives near here. He has been in this county a long time, and has been in various kinds of business, such as milling and mercantile business; and he has also done much public business for the county; but he has now given it all up, pretty much, and gone to

farming, that being most congenial to his taste and health. He has the agency of a few lots of choice land yet in that vicinity, which are held at prices that range according to the quality of the lands.

Yours, &c,

[Wm. O. H.]

A New Village.

[The following interesting letter from our agent, describing some of the natural curiosities and advantages of location in Southern Michigan, should have appeared in our March number, but was not received in time. It has lost nothing of its interest, however, by being kept.]

FRIEND JOHNSTONE:—This tremendous cold day, February 3, I have been over to a place called Mosherville, about six miles east of here, and as there are some natural advantages and curiosities about the place which are not common, I think them worthy of note. The village is located on the north bank of a small lake, such as I often meet with in my travels over this State, but the curiosity is, that the whole locality is in a bend of the Kalamazoo river—the river running round a circuit of some three miles returns to within eighty or one hundred rods of where it first coursed off to the north-east, and between these two nearest points are two small lakes. The water in the first or upper lake is about eleven feet higher than in the lower one, and a hard bank or ridge of earth runs between the two. In the state of nature a small outlet had cut its way through the embankment into the lower lake and from thence into the river. A Mr. Samuel Mosher, I think from the State of New York, in travelling through Michigan in 1836, discovered the spot, and seeing the natural advantages, located the land, thinking to improve it; but he died soon after his return to his family. He left three sons, but they not knowing the value of the place, let it lie unimproved for many years. Finally one or two families of them moved out and made a commencement about the beginning of 1849. They have cut a race through from the upper bend in the river into the upper lake. The cost was trifling, as there was but a short distance to excavate; nature, or the beavers, (and there is some speculation which,) had already built a dam.

There are now in operation, one custom mill, which besides doing custom work to the average amount of 22,000 bushels of wheat per year, with coarse grains in proportion, makes 3000 barrels of flour for market yearly; one good saw-mill, and a cooper-shop where most of the work is done by machinery; and they have yet plenty of water to spare for other purposes. I should think it a desirable place for mechanics, such as carpenters, cabinet-makers, and for wool-carding, and cloth-dressing and all branches of business needed in a farming community.

The village is laid off in lots of a quarter acre each, held now at fifty dollars. It contains the two mills, one cooper-shop, one blacksmith shop, one good store, well filled, one tavern, and in all twelve families. One commendatory feature, and one that I have not met with before in any village, new or old, in Michigan, is that the entire neighborhood are all sober and industrious, Mr. Alcohol not having yet got a residence among them; and I hope they mean to keep him out.

The village is situated a half a mile west of the Jonesville and Concord road, on Sec. No. 4, in the township of Scipio, being nearly equi-distant from Litchfield, Jonesville and Moscow. It is surrounded by a first rate farming country. Were I looking for a location as a mechanic, I should certainly visit this spot; for, notwithstanding the extreme cold wind of to-day, west by north, it is pleasant here in winter, and I am sure must be romantic and desirable in summer.

The present business firm is that of G. C. & J. Mosher; and though they may lack a little of the conventional etiquette of cities, they are gentlemen in the truest sense of the word; being agreeably pleasant, sober and industrious—just such men as compose the bone and sinew of the country. The appearance and immediate occupation of the merchant and postmaster, Mr. John Long, denote that he is a laboring man as well as a capitalist.

Mr. Editor, if you should make an excursion through this part of Michigan the coming summer, I think a visit to this place would well repay you for all your trouble.

J. A. B.

Litchfield, Hillsdale Co., Mich., Feb., 1855.

Experiments in Underdraining.

MESSERS. EDITORS:—I have been an actual settler on my farm here for 27 years. My acres number 123; it is called a small farm, but in my small way of farming, I find from actual experiment that it is more to my advantage to improve well what I have, than to add more acres. I wish to inform you about some underdraining that I have done myself, and also of the materials I used.

The first drain I made was filled with brush; after some time it was injured by a mill pond, so I cannot say how brush would answer, as the next I made was with pieces of split wood, laid from five to six inches apart, with a slab for a cover. The last draining I have done was with oak boards, full inch, side pieces 4 inches wide, lid or cover, 8 inches wide, drains 2½ to 3 feet deep. The soil where those drains were made was wet and unproductive, it is now the most productive land on this farm. The outlet of the drains gives advantages for watering stock, both summer and winter. I made one drain, tiled it with stone rather large for draining. I laid them with as much care as I ever did the stones in a drain in my native

land, which was Ireland, ten miles west of Belfast, county of Antrim. The last named drain closed with sandy earth, filling in with heavy rains. If I had stone I would not care to try the experiment again. There are other materials better adapted for draining in this country. I have about 30 rods of under-drain to make the coming spring, and shall make it of boards as described above.

Being far advanced in years, I feel a little unwilling to begin to write for the press, but on reflection I feel it a duty, as I consider your paper should be taken by every farmer in this country who wishes to improve his acres. I wish more farmers would give their practical experience on the soil they cultivate.

JOHN PHILLIPS.

Ypsilanti, Feb. 22, 1855.

[Yes, it is the practical experience of just such thorough going farmers as the writer of the above that we want. It is from the cultivators of Michigan soil that Michigan farmers wish to hear. The subject of underdraining is exciting a good deal of attention, but it is far from being as well understood or as generally practiced as it should be, and as it will be, it all who have tried the experiment will make known publicly that it is not only practicable but of great utility, both in reclaiming and making valuable lands which have heretofore been unproductive, and in increasing the fertility of those which are cultivated. We hope to hear from Mr. Phillips again, and intend to improve the first opportunity of leisure to visit his beautiful farm on the banks of the Huron.—Ed.]

Notes about the Wheat Insect.

EDITOR FARMER:—As I am travelling for your benefit, perhaps you would like occasionally to hear about some of the fine sights that I see, and the good things that I hear, together with new and then a piece of intelligence that may be of importance to your readers.

While recently enjoying the hospitalities of Mr. I. Newton Sheldon, of Lodi, he informed me that in seeding last fall there was about four days difference of time in sowing two fields of wheat; and the first sown promised well at first, but was attacked by the insect and the ground laid nearly bare, while the latest sown was comparatively untouched.

I have just left the farm of Aaron Case, of this place; he gives me the same information respecting his seeding last fall. Now for the why or wherefore. One thinks that if the farmer could once discover the exact time of the season that the insect is confined to, or confines itself to, he by delaying his sowing three or four days could avoid its ravages; but the other suggests that the time is not specific, but much or mostly depends on the state of the atmosphere and the coincidence of rain at or about the time of sowing. A third thinks both the above are wrong, and that a frost occurring between the first and last sowing de-

stroyed the fly so that no more nits were deposited; while a fourth is quite positive that the first sown piece concentrates the insect and it confines itself to that afterwards to the neglect of the last sown. This last strikes me as a rational idea. Let some farmer try it, and sow two or three acres a few days previous to putting in his fall crop, for the purpose of attracting the insect, at the same time watching the other assigned "wherefores," and if possible discover the true one.

Mr. Case showed me a beautiful flock of sheep, and told me it had been his first business to get sheep of a large size, and next to improve the wool in fineness. He showed me a fine looking cow and among other wonders told me she had produced seven calves in a few days less than four years, all now living.

In January I was at the hospitable mansion of Charles Kingsley, of Sharon. Mr. Kingsley was an early pioneer of Michigan, and made his first stop in Ann Arbor, before his marriage, and when he was quite a young man. Being by trade a miller, he spent most of his time in Michigan in that employment, but has finally retired to a farm and taken hold of farming in good earnest. Half, or perhaps more of his farm being marsh land, hay and cheese are his staples, consequently he did not suffer as much by the drouth of last summer, in his cash returns, as most of the farmers in this district. In speaking of cheese, Mr. Kingsley remarked that he got one piece of information from the *Michigan Farmer* about eight years ago that has been worth the price of the *Farmer* every year since.

But as these observations are already too much protracted, I close for the present.

Yours &c.,

J. A. B.

On Feeding Ground and Crushed Grains.

MR. EDITOR: In the patent office report of 1851 part 2d; Agriculture; on page 71 is an experiment made by Mr. A. Gyde, on feeding horses on ground and unground grain; two horses, in good health, were fed, each 5 lbs. of oats and 17 lbs. of good hay per diem; the only difference in feeding was, the oats for one horse were ground, the other not; on the fourth day of the experiment, the solid excrements of each horse was examined; 100 parts of that from the horse fed on ground oats, was found to be entirely exhausted of nutritious matter; while an equal quantity from the other was found to contain $\frac{1}{4}$ of one per cent of nutritious matter. Query: Admitting the $\frac{1}{4}$ per cent of nutriment was all due to the oats; as the horse was fed 22 lbs. hay and oats, it would give a loss on the oats of one and two fifths per cent; now is this small per centage sufficient to pay the expenses of grinding, when the mills charge 10 per cent for grinding clean grain and 12 $\frac{1}{2}$ for grinding corn in the ear? Would there be a greater loss in feeding unground corn than unground oats to horses? Was the experiment fairly con-

ducted? Many have their corn ground for horses; I do not believe that it pays, the opinion of the Rural New Yorker notwithstanding; which asserts that 60 bu. of ground grain, is equal to 100 unground; there is undoubtedly greater advantage in grinding grain for some kinds of stock, than others, but that paper makes no distinction; if there is a difference, writers and editors ought to note it, that the unobserving may not be misled.

The domestic animals appear to perform mastication with different degrees of perfection; the sheep performing it nearly perfectly; the horse appears to come next in order; then probably the hogs; while horned cattle pass much of their grain unbroken and apparently undivested of any of its nutritious matter; but even with them it is doubtful if they lose 40 per cent or even the half of it.

Will the Editor, or some other person posted in the matter, enlighten us farmers, who cannot be supposed to know every thing.

Respectfully yours

WM. CLAPP.

Hanover Jackson Co. Mich. Feb. 1855.

A Letter from N. S. Schuyler.

EDITOR MICHIGAN FARMER, SIR:—Having travelled through different parts of this State within a few months, I have observed a decided improvement in the appearance of farms, and a still more remarkable change for the better in the stock pertaining to them. These evidences of progress and prosperity very naturally lead us to inquire by what means, and through what particular incitement this improvement has been made so general and so rapid. The causes, no doubt, are many; but the most potent one of all is the general intelligence pervading society. Another question is, through what instrumentality have people grown so much wiser? My view is, that the establishment of Agricultural Societies, and the general diffusion of agricultural knowledge through the various publications of the day, have given this great impetus to a better and more profitable system of farming. That class of men who looked upon all learning emanating from books as a mere vagary, or as impracticable, are fast passing away. Only here and there a representative remains, as a memento of the past, and also to admonish us that posterity will regard the present state of things with the same commiseration we now award to that "passing away." With these examples and this warning before us, we yield to the adventurous spirit of the present, and the result is, that we advance more in one year than we did in fifty under the old system of "carrying a stone in one end of the bag to balance the grist in the other, because our fathers did." But some say, should they follow all they read in the agricultural papers, they would often be led into difficulty, and undoubtedly they would.

A paper published in Virginia, and adapted to farming there, or in South Carolina, would be a bad text book for our farmers of Michigan.

Take such papers as treat of subjects under similar condition to your own, for the most improvement and profit. It is to be expected that a paper whose columns are free to the discussion of the various disputed questions which arise, will present a variety of views, and it would show a lack of judgment to accept the whole as truth; but from the different views expressed we may glean something valuable, or we may be led to investigate and elicit the truth for ourselves.

Many are beginning to appreciate the idea that knowledge is money as well as power. Farmers have learned through scientific investigation that the gases evolved from their exposed manure heaps, are the same as those which they pay their money for plaster to arrest from the atmosphere and fix for nourishment for growing plants.

Again, it is by the aid of Science that we arrive at the relative value of various kinds of food. Whether a particular kind is azotized, and adapted to growing animals, producing bone, muscle and wool, or whether it is carbonized, and suitable only for fattening animals. By a knowledge of the component parts of food and their proper application, we do our feeding intelligently, and so as to realize our wishes with the least possible cost and trouble.

And now a word for the *Michigan Farmer*. As a favorable evidence of its prosperity and appreciation in this part of the country, I will state that some weeks ago I deposited some money for an eastern paper, for the purpose of obtaining it at the club price, at an office where a premium club was made up a few years since, and the post master told me within a few days that he could not get subscriptions sufficient to make up a club. People here, go for the *Michigan Farmer*, as being best adapted to their wants. N. S. SCHUYLER.

Birmingham, Feb., 1855.

Flour Corn.

MESSES. EDITORS OF MICHIGAN FARMER: By the time this reaches you, you will have received by express, a sample of my flour corn—both in the ear and flour. The latter is not as good as common—the fault being in the miller, and not in the grain; but if you have an opportunity of testing its quality by having some of it converted into a genuine “Johnny-cake” or otherwise, I wish you would do so, and if you think proper, give the “result of the investigation,” to your readers.

In a communication to the *Farmer* last winter, I made mention of the flour corn, and distributed some by mail among your subscribers. How it succeeded in every instance I am unable to say, but as far as I have been informed, it gave general satisfaction.

This variety of corn, as you will see, differs materi-

ally in its composition from any other variety, inasmuch as the kernel is composed entirely of a substance resembling the whitest wheat flour—there is no flinty substance in it, its bread is free from coarseness and strong taste, and on this account I think it will be preferred by all lovers of good things, when it is properly ground, bolted and prepared for food. As a crop to raise for stock it has its advantages; the kernel is tender as also the cob which has more pith and less wood than common corn, so that the cattle have no trouble in grinding it themselves, thereby saving the trouble and expense of milling,—while the stalks, being very full of leaves and sets, make more and better fodder than any corn I ever raised.

The mode of cultivating it does not differ materially from that of other kinds, except that it may be planted closer in the rows, and should not be planted till the ground is warm enough to give it “a good start,” and when ripe it should be stored in a dry place lest it become injured by the fall rains. I do not say that my corn is entirely a new variety, but I will say that I doubt very much whether as pure an article can be found any where;—for the flour corn is very much inclined to mix with other varieties when planted near it, and is sure to run out, in time, like many other things, by carelessness or neglect. But I have spared no pains in keeping it pure for several years, and find by so doing it improves both in quality and yield each year.

In presenting the flour corn before the public I wish it to be understood that dollars and cents is not my aim, nor am I disposed to humbug my fellows in these “times that try men’s souls”—but my object is to recommend and to circulate, an article that bids fair to prove a substantial and universal blessing. I am quite anxious to see this corn cultivated more extensively, for I consider it to be the only true substitute for wheat, and now, while the “insect” is destroying the latter, let every farmer contrive to raise something in its stead. For my part I shall prefer to make sure of my bread, by planting at least a few acres of the—*Ne-plus ultra—Flour Corn*.

Yours truly, D. D. TOOKER.

Napoleon, Mich., Feb. 14th, '55.

Stump Machines.

MR. EDITOR:—I see in your last number, an inquiry, for a Stump Machine. I am now building machines calculated for farmers use to remove stumps.

It is a three-legged frame with a lever and pulley, operated by an eight foot wheel upon a shaft, upon which the power is multiplied, say fifteen times, thus one horse will raise fifteen times his strength. It is portable with a pair of horses or cattle, and operated by the same, or a single horse, and with two men may draw a hundred or more stumps per day. Cost, \$50.

Respectfully yours,

GEO. N. BOLLES.

Kalamazoo, March, 1855.

Large Fowls—Error Corrected.

Troy, Feb. 19, 1855.

R. F. JOHNSTONE, SIR:—I notice an article in the February number of the *Farmer*, page 43, headed "Large Fowls," in which the writer, Mr. N., says the birds are of large size, and if any fancier can produce birds to excel his, he hopes to hear from them. I noticed, however, a slight mistake in the average weight of his fowls, of 8 pounds per head; he has got it 18 pounds 8½ ounces, you will find, which makes a difference of 8 pounds per head.

I will give you the weight of my Brahmas, together with the age. They were hatched about the middle of June, 1854; weight taken February 7; cock, 10 pounds 12 ounces. Two pullets, one 8 pounds 4 ounces, the other 7 pounds 12 ounces. Their weight I certify to, and my neighbors will if required. I have been offered \$15 for the cock. I intend to breed all the different and most popular breeds, and shall have my advertisement in the *Farmer* in the April number, as I consider that that is the place for such things, and every breeder in this State, if he knows his own interests, and intends to sell the best kind of fowls, sheep, hogs, horses, and cattle, will favor the *Farmer* with his advertisements.

Yours with respect,

E. H. CRESSY.

[The mistake to which Mr. Cressy refers is a typographical one, and chargeable to the proof reader. The copy reads, 10 pounds, 8½ ounces.]

A Large Egg.

MR. EDITOR: For a year past, I have kept various kinds of the improved varieties of hens, among which I have Black Spanish, Shanghae, Cochin China, Chittagong, Dorking, Brahma Pootra, Bolton Grey and even Bantams.

The other day one of our hens laid an egg of unusual size. It measured seven and a half inches around the longest way and 6 inches around the other way, and weighed four ounces. The fun of it was that the egg was laid by one of the common hens. If any of your improved fowls do better than this, I should be glad to hear of it. HENRY.

Eggs that are Eggs.

Our attention has lately been called to several very large specimens of eggs, laid by fowls of the improved breeds, or crosses thereof, which are certainly remarkable.

Mr. G. D. Rogers, of Nankin, in this county, left with us an egg from a fowl which was a cross between the Shanghai, Cochin China, and Bucks County, and which measures the long way, eight inches in circumference, and the other way six inches and a quarter; if there are any eggs laid this season that can beat it for size, would she like to hear of them.

Mr. E. H. Cressy, of Troy, sent us some eggs from his Dorking fowls, which are almost equal to the above; two of them measured, the long way, each seven and a half inches in circumference, and the short way, six inches. Those eggs are white, and very handsome.

Mrs. C. A. Warner, who lives at the corner of Brush and Croghan streets in this city, likewise sent us five eggs, with the accompanying letter, which shows that if eggs were sold by weight, they would count up very fast; these being a quarter of a pound each:

DETROIT, March 12, 1855.

EDITOR MICHIGAN FARMER, SIR:—The accompanying five eggs, weighing one pound and four ounces, were laid the week past, and were the first five eggs laid by a pearl shanghai hen belonging to me.

You will perceive but a slight difference in the size, the smallest being the first, and the largest was laid to-day, showing a small increase in size, every day.

They are a very little larger than they were last year, she then being a young hen, as she will not be two years old till the last of June next.

I have the speckled shanghais which lay very similar eggs in size, being but a little size smaller, and much larger than those from the brown or buff shanghae or Brahma Pootra, and they are remarkably good layers during the winter season, and much excel, as layers, any variety of the Asiatic fowls.

Yours, &c.,

C. A. WARNER.

Management of Bees.

MESSRS. EDITORS:—I notice in the February number of the *Farmer* an allusion to myself in connection with the management of the honey bee; and as my name is thus brought before the public, I feel it my privilege to make a few remarks in regard to keeping bees. This has been my business to a greater or less extent for quite a number of years. After I had had some considerable experience with bees, I got the fever for patent right hives, and purchased one. Not being satisfied with the good profit and success of my old hives, I wanted to try something new. I was led to believe that I could more than double my profits with a patent hive; so I purchased one and gave it a fair trial; and then another, and another; and after spending about two hundred dollars for patents, I was satisfied that the fever had progressed far enough, and it was time for me to resort to some other method, if I would reap the reward of my labors, and make the business successful.

Some may ask what hives have been found the best for profit. There have been so many forms given, and people have been humbugged so much, that it seems almost useless to write anything upon this subject; but as there are some anxious inquirers after information, I will give my views, though they may not

agree with those of apiarians in general. I hope the reader will bear in mind that I do not intend to condemn one patent for the sake of recommending another. I have no patent to praise, no interest in deceiving; and, I hope, no prejudices to influence me in advocating or condemning any system. I wish to make bee-keeping plain, simple, economical and profitable; so when we count the cost we shall not fall in the rear. Among the various patents of which I have knowledge, I think if I were to choose one in preference to another, it would be Miner's. That is the least complicated of any that I have seen. But I believe that I have supported speculators long enough; it will not pay; and I have gone back to my old plan of hives, such as I used years ago. I cut the side boards and front 18 inches long, and the back 13, so as to leave chamber room for the drawers. I make the lower section of the hive for the colony to live in, about one foot square inside. This is large enough for profit. The surplus honey from hives of this size pays me better than any other. I choose to have my bees in one body, instead of having them in what is called the "divided hive." I tested those hives well, but never had good luck with them and so gave them up. I have one or two of them on my stand, which were made four years ago. I change the bees into new hives, about once in four or five years; it is a thing very easily done.

Mr. N. asks my opinion in regard to the patent bee feed, or the production of honey from sugar. This reply will undoubtedly meet the eyes of thousands, and probably there will be a large number who will not agree with me.

I have confined bees for months in the dark, and fed them day and night all they would store away in comb and honey, and almost invariably I had to feed two pounds of honey to get one of surplus in the drawer. As regards the food or the composition of honey and sugar, I never thought it would pay, except to save a swarm in case of scarcity of honey. Very often when I have had a swarm that was destitute of honey, I have made food for them of sugar and honey and water. Take, for instance, one part of honey to about two or three parts of sugar, put in a quart of water, boil and skim it, and it is fit for use. It makes very good looking honey, but it has not the pleasant honey taste of that which the bees gather from the forest; and considering the price of sugar, and the amount it took to make the honey, I could not find it profitable. I never tried this experiment for any length of time, but once. The bees would work it well, and seemed to like it, but it did not pay me. If a person wishes to induce a few early swarms, it might pay to feed them.

The time is at hand when the miller will commence its work of destruction; but this is an easy thing to avoid or remedy. When you discover the worms or millers about, raise your hives just high enough to al-

low the bees to creep under on all sides, and they will keep them out.

As a general thing, it is the farmers who keep bees, but few mechanics have them; and a great many never know whether their bees are dead or alive. They seldom go among them to see how they are getting along. This is a poor way to make them profitable. I make it my business to pass around and examine mine once every day, to see that all is right, and by so doing, I manage to keep them healthy and vigorous, and in a prosperous condition, so that each hive will give me one or two good swarms during the season.

A. F. MOON.

Paw Paw, Feb., 1885.

On cutting Timber.—White oak Insect.

DEAR SIR: As there is much said and written on the subject of cutting and preserving timber, perhaps an ancient recipe, will be new to your readers. It is an extract by Dr. Adam Clark, from "Vitruvius," "1st. Trees should be felled in the autumn, or winter, and in the wane of the moon; for in this season the trees recover their vigor and solidity, which was dispersed among their leaves, and exhausted by their fruit, in spring and summer; they will then be free from a certain moisture, very apt to engender worms, and rot them; which in autumn and winter is consumed and dried up. 2d Trees should not be cut down at once; they should be cut carefully round, toward the pith, that the sap may drop down, and distil away, and thus left till thoroughly dry, and then cut down entirely. When fully dried, a tree should not be exposed to the south sun, high winds, and rain, and should be smeared over with cow dung to prevent its splitting. 3. It should never be drawn through the dew, but be removed in the afternoon. It is not fit for floors, doors, or windows, till it has been felled three years." "Perhaps these directions, attended to, would prevent the dry rot, and we see from them that there is considerable skill required to hew timber, and in this the Sidonians excelled." "We do every thing in a hurry, and our work is good for nothing." If that is true of the English what shall we say of the Yankee Nation.

I think our wagon makers, and others, may learn something, in preparing hubs, plow wood, and dray timber, and other implements for farming.

T. J. C.

P. S.—There is a certain "Trespasser," in these parts which I intended to have secured, and sent to you, to be arraigned, and tried, and executed, or disposed of in a proper manner. He is making sad havoc among our best young timber; he seems to prefer one species of white oak to others, but works in others one. He has destroyed a number of acres for me, and is still at work, in my best timber. He appears, and works, similar to the "animal" that girdles so many apple and peach trees, only larger, and would require

quite a troop of wire workers to destroy them, I think. The timber decays very quick. Are they not the same that worked in the tamaracks a few years ago, and might not they be the cause of the destruction of the timber on the openings and prairies, and prepare the way for fire, and are they not the same, or similar to the "trespasser" of the "southern pineries," which saves them the trouble of gathering the turpentine?

Yours &c.

T. J. C.

Farm Buildings.

EDITORS FARMER:—I am pleased to see the subject of farm buildings noticed in your paper. I hope some one will get up plans for rich and poor farmers, with estimates of cost, &c., something original, American, healthy, convenient, substantial; something that the wind cant blow down, and that will look fit to be a farmer's home.

The practice of erecting narrow, high buildings, with slight foundations, and soft wood 4 by 4 inch scantling for frames, is much too common here. This State is subject to strong winds, mostly westerly, & may be known by the wind-falls, evidences of which may be traced back for centuries. The last one I know of, happened about 40 years ago; its extent was from fifty to eighty miles in length, and from a quarter to a mile in width. All the timber in its course was leveled to the earth. We have every reason to expect that such things may happen again. I pity the people living in those high, light, airy castles, when the winds sweep over the country. I will give you my idea of what a farm house in this State and climate should be. 1st, nearly square; 2d, good foundation, with cellar half above ground, to make it airy and healthy; building one story and a half high; 3d, kitchen and wood-house on the west side of the main building, to break off the main force of the wind.

I hope to hear from Mr. Betts in the *Farmer*; I think he has some good ideas on the subject of farm buildings.

G. C.

Keweenaw, 1855.

Planting Ornamental Trees.

TREES, SHRUBS AND PLANTS FOR AN ACRE.

In the last Number of the *Farmer* we promised to give a selection of trees, shrubs and plants, for embellishing the grounds immediately about the dwelling. We are well aware of the objections which the scientific improver will make to an indiscriminate direction of this kind, but cannot help it. Our doctrine is, *plant trees*—plant them in the garden, the fields, by the road-side. Plant those which harmonize in character with the scenery and with the spirit of the place, paying some attention, also, to the architecture of your buildings,—plant such if convenient or possible, but if not, plant anything which is worthy.

If your grounds are limited—one to three, or five acres—the first step is to surround the whole with a thick belt of forest trees, of those kinds, chiefly, which are natural to the location. Within, let be lawn, with the more beautiful and rarer trees in groups, singly, like the planets in the firmament; with clusters of flowering shrubs, ever-blooming and climbing roses. But trees, among all the material at our command, are the most easily managed, the most highly ornamental and most indispensable. We introduce them anywhere and everywhere—on the hill-tops and in the valleys, in the fore-ground and back-ground, with the same pleasing effects. They are among the most beautiful objects in nature.

LIST OF DECIDUOUS TREES FOR PLANTING ONE ACRE.

Sugar Maple, <i>Acer saccharinum</i> ,.....	150
White Oak, <i>Quercus alba</i> ,.....	20
White Ash, <i>Fraxinus americana</i> ,.....	6
Tulip Tree, (Whitewood), <i>Liriodendron tulipifera</i> ,..	14
American Larch, (tamarack), <i>Larix microcarpa</i> ,..	6
Silver-leaved Poplar, <i>Populus alba</i> ,.....	5
Yellow Locust, <i>Robinia pseud-acacia</i> ,.....	5
White Elm, <i>Ulmus americana</i> ,.....	10
White Horse Chestnut, <i>Aesculus hippocastaneum</i> ,..	2
Scarlet Flowering Maple, <i>Acer rubrum</i> ,.....	20
American Beech, <i>Fagus americana</i> ,.....	2
Weeping Ash, <i>Fraxinus pendula</i> ,.....	2
Osage Orange, <i>Maclura aurantiaca</i> ,.....	2
White flowering Dogwood, <i>Comus florida</i> ,.....	3
Mountain Ash, <i>Sorbus americana</i> ,.....	3

HARDY EVERGREEN TREES.

Norway Spruce, <i>Abies picea</i> ,.....	2
Hemlock, <i>Abies canadensis</i> ,.....	2
White Pine, <i>Pinus strobus</i> ,.....	2
English Yew, <i>Taxus baccata</i> ,.....	1

LIST OF HARDY SHRUBS GROWING FROM 6 TO 20 FEET HIGH.

White Fringe Tree, (Snow-drop), <i>Chionanthus virginica</i> ,.....	1
Pink Flowering Hawthorn, <i>Crataegus oxyacantha</i> var.,	1
Strawberry Tree, (wahoo), <i>Euonymus americana</i> ,..	1
Rose of Sharon, many colors, <i>Hibiscus syriacus</i> , 1 of each,	1
Swamp Magnolia, <i>Magnolia glauca</i> ,.....	2
Fragrant Syringa, <i>Philadelphus coronarius</i> ,.....	2
Persian Lilac, white and purple, <i>Syringa persica</i> , 2 of each,	2
Snow-ball, <i>Viburnum opulus</i> ,.....	2

SHRUBS, GROWING FROM 1 TO 8 FEET HIGH.

Sweet-scented Shrub, <i>Calycanthus floridus</i> ,.....	2
Japan Quince, scarlet, <i>Cydonia japonica</i> ,.....	1
White Mezereon, <i>Daphne m album</i> ,.....	1
Oak-leaved Hydrangea, <i>Hydrangea quercifolia</i> ,..	1
Common Privet, <i>Ligustrum vulgare</i> , for ornamental hedge,	1
Double rose-colored Tree Peony, <i>Paeonia rosea</i> ,....	1

EVERGREEN SHRUBS.

Tree Box, <i>Buxus arborescens</i> ,.....	2
American Holly, <i>Ilex opaca</i> ,.....	2
Common Laurel, <i>Kalmia latifolia</i> ,.....	1
American Rhododendron, <i>R. maximum</i> ,.....	2

In planting a belt of trees, nothing could be farther from good taste than to make it of uniform thickness throughout the whole length. It should now and then jut boldly out into the enclosed area, and now dwindle down to barely preserving the connection, avoiding *regularity* as much as possible. When it is desirable to preserve a distant view, the belt must be gradually broken and full space allowed for the view.

B.

B. C. of Ionia county. Your letter is received and will be answered next month.

Description of a Stump Puller.

MR. JOHNSTONE :—In the March number of the *Farmer* you asked for information about stump pullers. I will give you the benefit of what experience I have had with them. Many farmers doubt the utility of such machines, as I did once; but this only shows how easily a man may be mistaken.

My brother's farm joins mine, and we both found the stumps so much in our way that we concluded to try some means of dislodging them. Knowing that stump machines were much used in the State of New York, my brother went there, and after travelling about and examining quite a number, he bought one that works on the screw principle.

I will try to describe it, but do not know how I shall succeed.

To begin with, the screw is nine feet long and four inches in diameter. The thread is $\frac{3}{4}$ inch and what is called $1\frac{1}{4}$ inch lead, made of wrought iron. The nut is cast, and is ten inches long, with one flat side to bolt the sweep to; and it sits on two washers, made like the bottom of a dish so that they play the one in the other; they lie flat on the top of three posts. The posts are from twelve to fourteen feet long, according to the spread you wish the machine to have. The posts stand on axles eleven feet apart at the bottom, that is, the two hind posts; the forward one stands on the center of the forward axle, with a block on the end bound with iron bands. The king bolt goes through this block and the forward axle, which is three feet long. The wheels are made of 4 inch plank, pinned together with wooden pins. They are made eight inches thick and thirty inches high. The forward wheels move round like those of a wagon. The machine is very easily moved from one stump to another; one yoke of oxen being sufficient to move it anywhere. The tops of the posts are fitted together, and bound with a three inch iron band and three bolts; a hole is in the center for the screw to pass through. There is an inch and a quarter band passing round the forward post, 5 feet from the top, and through the two hind posts to keep it from spreading. The washers play in each other so that the screw plays without any danger of cramping. There is nothing about the machine liable to get out of order, and it only requires about twelve feet of chain. We use one horse on the end of the sweep, and this is enough to raise any stump.

We pull from thirty to forty per day, with three hands, in a soil of clay loam; and some of them are three feet in diameter. The screw, nut and washers, were made in Nunda, Genesee county, N. Y.

Our machine is not for sale. The cost, without the wooding, is \$100. I made the wooding for mine myself. Respectfully yours, **R. HAVILAND.**

Byron, Shiawassee Co., March, 1856.

No farmer should let the spring open without having his manure heaps scraped up clean.

HORTICULTURAL DEPARTMENT.

J. C. HOLMES, EDITOR.

The Cranberry and its Culture.

CONTINUED.

When the roots are thus transplanted, a foot or a foot and a half being left between them, they are expected to spread and entirely cover the ground with vines, in about three years. If the plantation is troubled by grasses at first, the rapid growth of the plants will generally destroy them in the course of three or four years. In one of the most successful cases which have come under my observation, where the plants have been set about six years, the quantity of grass and weeds was much less the last season than the preceding; the vines produced abundantly, and there seems to be every reason to suppose that the cranberries will very soon take full possession of the ground. But if they are set sufficiently near, and have a proper amount of labor bestowed upon them, they will ordinarily, on sand, get an early hold of the ground and bid defiance to all opposition.

In some swamps and peat meadows, generally denominated "shaky" the surface is composed of a matting of roots, mosses, and various undecomposed organic matter; the whole of which seems to rest on a liquid, or almost liquid, bed beneath. This top matting may be thick and strong enough to prevent a person walking over it, from falling through. In such cases, the surface cannot very well be taken off, and the sand must be put upon the top; but careful consideration should be given to the quantity used, as, if too much be put on, its weight may sink the whole surface into the water beneath. Two or three inches will commonly be found as much as it is prudent to use. I have seen several examples where a neglect of reasonable precaution, in regard to this matter, has cost the owner the loss of all his labor and expenditure.

The mode of treatment which has been described, will be found to be the best for swamps surrounded by large quantities of sand; and experiments, extending over a term of seven or eight years, with plants every year becoming more and more productive, show conclusively, that cranberries will flourish in pure white sand, if they are supplied with sufficient moisture.

If the position be a peat meadow, substantially the same course should be pursued. If very moist, it would perhaps, be well to arrange suitable drains; if they could be so constructed as to make it possible to flow the plantation in a very short time, it would, at times, be highly beneficial in preventing frost. The surface should be pared, the turfs being sometimes taken off and piled up for the compost, and sometimes turned directly over and left on the ground. As to the next step, in such cases, there is great difference of opinion, some preferring to cover the whole with sand—or gravel, if sand cannot be had—and others, to put the vines directly upon the peat bottom. The black soil it is thought, is very useful in securing sufficient warmth in spring and autumn, as a protection against frost. This point has not been fully settled by experiment, so that it is impossible to say positively, that the one course or the other is the better. So far, however, all things being taken into consideration, the weight of opinion seems to be in favor of the former course,—covering to the depth of three or four inches with sand, or, where sand cannot be obtained, with gravel. This method very much diminishes the labor of hoeing, if it be found necessary, where the

roots of grasses or bushes are left in the peat. Most cultivators prefer to hoe a little, sometimes twice or three times the first and second years after transplanting, or till the vines have trailed so as to make it inexpedient. The objection to transplanting in pure peat bog without sand, does not arise from the nature of the soil itself, which is, perhaps, as favorable, or nearly so, to the cranberry, as sand; but rather from the cause alluded to—the difficulty of hoeing, if the plants require it, when set in peat. The cranberry seems to have a wonderful power of adapting itself to any kind of soil; it draws its nourishment mostly from the atmosphere, though a liberal supply of moisture is desirable.

A somewhat simpler mode of procedure is sometimes adopted in the case of ordinary low meadows or swamps in the country. If the meadow is covered with bushes and hassocks, the former are cut and the roots taken up with the grubber, and the latter are cut off level with the surface, when the vines being taken up from another part of the meadow or elsewhere, are set by first striking a hoe into the soil and raising it slightly, when the roots are inserted and pressed down with the foot. In this way, a large space may be quickly set with vines, which, under favorable circumstances, may cover the ground in three or four years. This method, it is evident, requires but little skill.

I have never seen more than one or two plantations with the roots set in the mud alone. In these cases the soil had settled around them, leaving the plants standing on the ends of the roots, nearly out of the ground. So far as can be judged from appearances, they were by no means likely to grow; while close at hand was a piece covered with sand, on which the vines are very thrifty, with not a sign of failure. The mixture of sand had given the surface more consistency, and the plants had become well rooted and strong.

The experiments which have already been made, clearly show the practicability of raising cranberries on upland. I have seen flourishing plantations of them on all varieties of soils, from a high and light gravelly loam, to a very deep, rich, garden soil. Indeed, the universal opinion seems to be, that such cranberries are better than those growing naturally in wet meadows. In the instances which I have myself seen, the land had been carefully ploughed and prepared, as it usually is for strawberries, or plants of that description. The plants were taken from their original situation in the manner described, in the sod, and freed from grasses and roots; they were then put into shallow trenches or drills dug for the purpose, about two and a half or three feet apart. In consequence of the large space left between the drills, constant and careful attention was necessary for two or three years, so that far more labor was spent on them than the same area of strawberries would have required.

In one case, the plantation was situated on a high and dry hill, in a light loamy soil, and no water was supplied except what they had from occasional rains. The vines nearly all lived; but as the plantation was only three years old, and the rows too far apart, they had not wholly covered the ground, nor had they borne to any extent.

In the cultivation of cranberries, whether on upland or lowland, it is very important that the ground should be entirely covered with the vines as soon after planting as possible, not only on account of the great saving in labor, by thus preventing the growth

of grass and weeds, but also, because very little fruit is commonly produced till the vines have thus spread over the surface. At the end of three years the whole ground should be covered; but in the instances of upland culture referred to, it was not so, though the plantation had been set at least three or four years. Probably, if the roots had been put but twelve or eighteen inches apart each way, the result of the experiments would have been more satisfactory in this respect. As it was, however, the yield in 1852, was one bushel to the square rod, when cranberries were selling readily at four dollars per bushel.

But, in estimating the comparative profits of the upland and lowland cultivation, it will be borne in mind that the labor on upland is greater, and the land more valuable for other purposes. The liability to frosts, is not, however, quite so great when the cranberries are in blossom. There can be no doubt that it will grow and do well on upland, and produce too, a superior fruit; but it seems to prefer a poor, sandy soil, full of moisture, such as can be best obtained by improving swamps, which unless used for this purpose, are nearly worthless. Half an acre of cranberries, on a very rich upland soil has been estimated by the owner to have cost him, after being set four years, and including labor, interest of land, and other expenses of cultivation, about \$300, or at the rate of nearly \$600 to the acre; whereas, it has been seen that the roughest and most unpromising swamps may be reclaimed and set with cranberries at about half that amount. If the soil be a rich loam, as in the case above mentioned, the grass and weeds struggle very hard for the mastery, while on the poor and barren sand they hardly grow at all if the ground has been properly prepared in the first instance; so that the labor of cultivation is very little, at most, and many think that no care at all is needed. Thus, there seems to be much truth in the remark which I have often heard on this subject: "Give us sand and water enough, and we can grow cranberries to any extent." So far as my own observation extends, the fruit grown on pure white sand, is quite equal in point of size and firmness to that grown on upland. More experiments, may, however, show farther advantages in its extended culture on upland.

It should be remarked that it will be well to spend sufficient time in planting the vines, to do it properly, since they will thus get an earlier start, and sooner cover the ground. In the case of one plantation, visited during the process of transplanting, after the sand had been filled in and leveled, a line was carefully drawn and marks were made in the sand, eighteen inches one way, and one foot the other, when holes were dug three inches deep by one man with the hoe, while another followed, dropping five or six roots into each hole, and after him followed a boy who pressed the sand carefully about them. In this way, an acre was quickly planted.

No manure is needed for the cranberry. Indeed, from what has been said, it will be evident that the poorer the ground the better. In the experiments which have come under my observation, where manure was used, it caused the coarse grasses to grow abundantly, to the injury of the cranberry plants, which were not apparently benefited by the manure. But in cases of upland culture, swamp mud is often used about the vines, and with apparent profit.

In the case of vines growing naturally, it will be found advantageous to spread over them occasionally, a thin covering of sand.

Time of planting.—If the cranberry is to be raised

from seed, it may be sown in the fall or in the spring. For some reasons the latter is preferred, and the month of May is selected. It is better to crush the fruit and separate the seed from the pulp, though the latter is not necessary. The berry is sometimes crushed and mixed with sand, by which means the sowing is made more easy.

If the plants are to be propagated by cuttings, the spring is considered preferable. The ground should be moist, but not liable to be flowed immediately after planting.

But for the usual mode of transplanting the vines, the fall is generally preferred, though there is no difficulty in making them live when transplanted at any season of the year. I have known them transplanted in the middle of summer, and to live and do well. But if the planting be done in the fall, they take root in the spring and grow more vigorously the first year, than they otherwise would. For this reason, if the ground can be made ready in the fall, it is desirable to have the vines set out then, and they will thus ordinarily have the start of those planted the following spring, by two or three months. If planted in the autumn, they will also bear a little the next summer, and the crop will increase gradually till the fourth or fifth year, when it seems to attain its highest yield. Circumstances may make some difference in the length of time which must pass before a full crop is obtained, as, if the vines are much choked up by grass, and retarded in their growth for want of care. The statement made above, both as to the time ordinarily required, and as to the effect of the unfavorable circumstances alluded to, is confirmed by the experience of many who have been engaged in the cultivation of cranberries long enough to have had opportunities of extended observation on the subject. There seems to be no reason why the crop should diminish after the fifth year, nor is it certain that it will, as a general rule; yet it is evident that if, at this age, the thrifty and healthy vines have covered the whole ground, they will be likely to bear to their utmost capacity. Probably, after the seventh or eighth year, it will be found to be well to rake or stir the surface under the vines so far as it can be done, or perhaps, to spread over them a thin covering of sand or loam.

The Yield.—The yield will vary according to circumstances, but about one hundred and fifty bushels per acre will be a fair average; though an acre in full bearing will often produce more than two hundred bushels. In a very large number of cases, a bushel to the square rod has been gathered without much trouble of cultivation. In one lot visited by me, more than three bushels to a rod, or at the rate of four hundred and eighty bushels to the acre, on two or three rods, were obtained from very thrifty vines on a peat bottom, with a thin covering of sand. This must be regarded as a remarkable yield; and when the quality of the fruit is such as to command a ready sale at from nine to eleven dollars a barrel, which was offered for them the past season, this crop must be acknowledged to be very profitable.

The Cranberry Worm.—There is an insect which attacks the cranberry. Its history and habits are not yet fully known, though the subject is now studied so closely that they will probably soon be determined. The egg is supposed to be deposited in the blossom. From this egg proceeds a small caterpillar, which works its way through the fruit, eating the pulp and causing the green fruit to turn red prematurely and decay. It bears a striking resemblance to the apple-worm, and seems to be very much like it in its habits.

This similarity has been observed by Dr. T. W. Harris, as appears by a letter from which the following extract is taken:—

"Within the past two or three years, some complaint has been made of injury done to cranberries by insects. A sample of the injured fruit was put into my hands by the editor of one of our agricultural newspapers. The insects found therein were small, naked caterpillars, strikingly like those called apple-worms, or core-worms. Their habits seem to be identical with those of these common depredators. Each of the affected cranberries had been tenanted by a single worm, which had entered, when very small, and had devoured more or less of the pulp, filling its path with its blackish excrements. Not having traced this insect to its final state, I cannot positively assert that it is the same species as that which affects the apple; but if not the same, it is probably congeneric or closely allied thereto. I am not acquainted with any other insect attacking the cranberry."

Others have observed a striking resemblance of the appearance and sensitive nature of this insect to the Palmer worm.

Two different remedies have been adopted for this evil. One is to flow the cranberry ground one whole year, thus losing the crop one season, and the other is to sow salt upon the cranberry bed, at the rate of about five or six bushels to the acre. On plantations which cannot be flowed, the latter will probably be found to be the only effectual remedy. If what has been observed be true, that cranberries growing on or near a salt marsh are superior to any others, it is also natural to suppose this application of salt would be beneficial to the cranberries, even if it did not destroy, or prevent the ravages of, this insect.

Mode of Gathering.—In this country, the cranberry is generally gathered with a rake made for the purpose, with which twenty or thirty bushels a day can be taken from the vines. But on newly planted beds, or loose sand, there may be danger that this method will injure the roots, and it will not be found expedient, in such cases, to use the rake till the roots are very firmly rooted, and have covered the ground. But raking in the majority of cases, so far from injuring the vines, is probably a benefit to them, when no other cultivation is practicable. In Germany, the small cranberry is gathered by means of wooden combs. In England and Scotland, where they are not found in so great abundance, they are generally picked by hand.

The Dahlia.

In answer to our correspondent E. F. R. of Ohio, we will say that with us the Dahlia is a favorite autumn flower, but to have it in perfection in its season it is necessary to give attention to the time of planting, as well as to the soil and cultivation.

There are many new and choice varieties raised from seed every season, which for a few years command a high price in the market. For the double purpose of meeting the demand for these choice varieties, and for making money, the florist propagates them as extensively as possible; this is done by planting the tubers in pots early in the season and starting them in the greenhouse, or in hot beds; as they throw up their shoots, these are cut into short pieces and planted in pots where they are managed the same as

cuttings from other plants. They soon strike root, throw up a stem, and are ready for sale; but plants grown from cuttings are generally weaker, and do not flower so well as plants grown from strong tubers. The usual method of propagating the Dahlia is by a division of the root. As the latent eyes, or buds upon the crown of the tubers cannot always be readily perceived, they are put into a hot-bed to give them a start; as soon as the eyes have pushed sufficiently, they can be detached, taking if possible a piece of the tuber with each bud. These can be planted in the ground, each bud making a separate plant, or what is better, plant each bud in a separate pot, plunge the pots in a hot bed and there let the plants grow until they are large and strong enough, or until the time arrives for planting them in the open ground. They may then be turned out of the pots into the places prepared for them without injury to the plants.

We do not care to plant Dahlias into the open ground until the last of May or first of June; if planted earlier they are too liable to spend their strength to but little purpose in trying to blossom in the arid months of July and August, thereby disappointing the cultivator by producing a few miserable, meagre abortions, instead of the beautiful, full, perfect blooms he had anticipated.

If not planted out until the last of May or first of June, they will in early autumn, under good care and culture, enrich the garden by opening out their splendid blossoms in their greatest perfection, and continue to flower until cut off by frost, or some other untoward circumstance.

We have grown the Dahlia upon all kinds of soil, but they prefer a light, moderately rich, sandy loam.

Horticultural Operations for April.

NURSERY.—Nurserymen will be busy this month grafting, lifting, packing, sending away, receiving and planting trees, stocks and shrubbery. The season from the breaking up of winter to the bursting of the buds is so short that nurserymen who expect to make money at their occupation must keep both their mental and physical faculties wide awake and hard at work. The nurseryman must study as well as work; both mind and body must be employed. The winter months afford time for reading, and the summer months for putting in practice what has been learned during the winter, as well as for continuing his studies in the field where the book of nature is spread out before him inviting his attention. Undoubtedly many of our nurserymen have taken advantage of the long, cold winter from which we have just emerged, to add to their stock of knowledge by study and reflection, and laying out for themselves a plan of operation, so that they are better than ever prepared to go to work systematically, understandingly, and prosperously.

The nurseryman should have his specimen trees un-

der cultivation, and get them into bearing as soon as possible, in order that he may as far as practicable test the different varieties in his own soil and climate, and have his own tested trees to propagate from.

Engrafting may be continued this month.

Stocks that were budded last fall should now be examined and where the buds are good, head back the stocks to within a few inches of the bud. By leaving a few inches the bud will make a better growth, and it answers a good purpose to tie the shoot to, should it be disposed to strike off at an angle of 45 degrees.

Plant apple, pear, plum, cherry and quince stocks for budding in the fall. If peach pits were laid down in the fall as we have upon more than one occasion described, they will not require to be cracked, but will be found to be starting finely in the seed bed, from which they may be planted into the nursery rows.

Plant cuttings of Angers and French quinces for stocks for pears, also cuttings of grapes, currants, gooseberries, &c.

ORCHARD.—Continue pruning, engrafting and cleansing the trees. If there are any spaces to be filled, place in them good trees of choice varieties.

Examine the roots of peach trees; if any worms are under the bark, take them out, cover the wounds with earth and let them heal.

GARDEN.—In forking over the beds of asparagus and rhubarb be careful not to injure the crown of the plants.

Sow early peas as soon as the ground is sufficiently settled.


If cabbage, tomato and other plants in the hot beds are disposed to draw up tall and slender, transplant them into other beds that they may become stout, strong and healthy when transplanted to the open ground.

Prune the roots and other shrubbery; put the grapes in order upon the trellises.

Orchards and Grafting.

MR. EDITOR: As the season approaches for improving our orchards, I have thought perhaps a few hints and suggestions on grafting might not come amiss from an old settler who has had considerable experience in the business. I think every observing man must now be satisfied, that the prospect of overdoing the *fruit business*, must be at a great distance ahead, to say the least, and therefore no farmer need be afraid to set out an orchard.

In the first place cut all your scions from bearing trees, when practicable—we have many of us been bit by the opposite practice in this vicinity. Some ten years ago I bought some thirty trees from a nursery near by, where the nurseryman was in the habit of grafting from scions cut from the adjoining grafts of one or two year's growth, and, although my trees have grown very thrifty, and some of them from three to

five inches in diameter, yet they have not altogether borne one bushel of apples—and my neighbors who bought trees from the same nursery have fared no better; and there is an orchard near here that has been set some fifteen years (trees taken from another nursery where the same process was performed) that has never borne any amount of apples. Now I can account for this barrenness in no other way except from the scions not being taken from bearing trees—for my trees properly grafted from good scions have universally borne the second or third year. When grafting on old trees, cut the limbs very close to the bodies—say from four to six inches. Get your top down, you will soon see the benefit of it—you can never get a fine top from grafts set six or eight feet from the bodies. If you have to cut limbs six inches through there is no danger if you set in scions enough, and keep it constantly covered with wax. In setting into large stocks don't split your limbs square across—but about thus— be careful to set in outside as soon as can cut out what you do not need.

It don't make much difference when you cut scions if you will keep them fresh, or when you set them. I once set a graft in July, and it was leaved out and growing finely in two weeks—it having been cut, and buried in the earth from April. I have set from 10 to 15 scions in one limb at a time. Above all don't set *travelling grafters* at your orchard; but go to some orchard and cut your own scions—and set them too. You may say you can't, but I say you can. The first grafting that ever I did, lived first rate, and I had never seen the performance before. Be sure you don't get too many kinds—that was my fault at first—but I have remedied that now, having grafted some of mine three times. You want, say about the following kinds: I have the Harvest (tart bough) Sweet Bough, Early Joe, Summer Greening, Snow, Norton's Melon, Rhode Island Greening, Swaar, Spitzenburgh, Russet and Northern Spy, Talua Sweeting, these will last through the year. But don't get 100 kinds, it won't pay. I would like to have written much more but have got to the bottom of the sheet; possibly you may hear from me again on this subject.

Yours, WM. CONE.

Troy, March 15th, 1855.

Ashes for the Curculio.

NORTHVILLE, Feb. 27, 1855.

EDITOR MICHIGAN FARMER, SIR:—As much is being said in your columns about the curculio, I will give you some of my experience in regard to their depredations, and the remedy. I have a large number of plum trees on my lot, and I have never failed of having a good crop of plums since I commenced putting ashes around my trees. I came in possession of some trees last spring, which had never yielded a

good healthy plum till this season, when I took and hoed the top of the ground away from the roots of the trees. I then put a layer of chip manure, and then a layer of ashes around each tree, and the result was a good crop of nice plums, and I will not hesitate to say that a tree served in this way will bear.

Yours in haste,

A FRIEND.

[If "a friend" had put his name to this very sensible communication, it would have been much more valuable; because those who read it, would have known upon whom they had to rely for the truth of the statement and recommendation contained in it. The reasonableness and coincidence of the letter with statements of the same nature made by writers last season, has given it a place in our columns; though in violation of our rule to refuse anonymous letters. —ED.]

LADIES' DEPARTMENT.

Fashion.

Fashion! Who, or what is she?
Where her home, or ancestry?
Where the land from whence she came?
And pray what was her maiden name?

"I sit a queen," she seems to say,
And sways her sceptre day by day,
As though none dare dispute her claims,
O, question in the least, her aims.

Of glittering joys she loudly prates,
And lures within her open gates
A multitude, with promise fair,
Of happiness and pleasures rare.

Although her dupes are numberless,
And live, and rule, in every place
Of social life, I long have known
They're not the sinew or the bone.

Who is she? I would ask again;
Ye who follow in her train,
Answer me, say one who will,
Or give me leave to try my skill.

I know this much of her—she's old;
Her silver locks have made her bold;
In fact, she's held the reins so long,
To wrest them from her might seem wrong.

I think, (but hardly dare to mention,)
That she's the child of Great Pretension;
I'm sure of this, she sprang from earth—
She cannot be of heavenly birth.

For sake her, then, ye glady train,
Nor longer let the tyrant reign;
Hear wisdom's voice, make her your queen,
She'll lead to happiness, I ween.

Oporto, Mich., Feb. 9, 1855.

ANN, OF THE FARM.

What made the Girls so Delicate?

"Wife, why don't you make the girls get up and help you about the breakfast? Here I have been waiting nearly an hour,—the team is ready, and Brown is here to go with me to the woods. I can't have such work as this; when I pay a man for a day's work, I want to give him a chance to do it; not keep him waiting for me till nine o'clock, these short days."

"Breakfast will be ready soon; you and the boys can sit down now and begin to eat, some of the smallest potatoes are done, you can begin with them, the rest will be ready in a few minutes. I can't bear to make the girls get up so early these cold mornings, when they dread it so. I would rather do the work myself, if it does take a little longer, than to have them around complaining of the cold, and half asleep; and besides, they are so slow and awkward about housework I can have no patience with them, it's ten times easier to do it myself."

"But they must learn sometime. Jane is fifteen, and Laura twelve; they ought to be able to help you a great deal now," said Mr. Lawson, as he sat down to the half-spread table, and helped each of his rosy cheeked boys to one of the three potatoes which proved to be the nearest done of any in the kettle. He took the third himself; and with a cup of half-boiled coffee, and some doubtful looking bread, the father and his sons made their morning meal.

This was during the short, cold days of winter; the snow was deep, the sleighing fine, the atmosphere clear, bright and invigorating. Mr. Lawson was anxious to get up his wood for the next summer and winter; he had hired a man by the day, and his two boys, proud that they could be of service to their father, had risen with the morning dawn; they had been to the barn and fed and curried the horses, and then instead of leading them to the well to water, rode them down to the creek, cut a hole in the ice, and let them help themselves. It was this exercise in the fresh, keen morning air that had flushed their cheeks with such a rosy glow, and given such sparkling brightness to their eyes. Their appetites, too, were sharpened to such a degree that poor Mrs. Lawson seeing how fast her bread was disappearing, tried the potatoes again and again, and at length finding two into which she managed to thrust the fork far enough to lift them from the kettle, she begged the boys to try to eat them, that she might have bread enough for dinner, as it was now so late that she could not bake till afternoon.

"They are rather bony, mother," said Alfred, "but I guess we can eat them; don't you Johnny?"

"Yes," says Johnny, "I could most eat mine if it was raw; everything tastes so good this morning."

Johnny was ten years old, and Alfred in his fourteenth year; healthy, bright-eyed, noble-looking boys were they both; and they tied the lappets of their caps down over their ears, buttoned their coats up to their chins, put on their mittens and went to the woods with their father and Mr. Brown on the big sled.

It was after nine o'clock when Jane and Laura made their appearance in the kitchen. Their cheeks were pale, their eyes dull and heavy, and both looked cross and fretful, and acted as they looked. When the breakfast was over the mother went about mak-

ing the dinner, leaving the girls to wash the dishes, which they did barely in time to have them ready for the dinner table. The afternoon was spent between the mother and daughters in washing dishes, making beds, and getting the supper; in the evening the girls whiled away an hour or two with their knitting, and then went to bed; and the mother sat up till nearly twelve, to finish garments begun by them long ago, and of which they actually stood in need, but were too indolent to finish for themselves. They knew mother would do it before she would let them suffer; yes, and they knew that mother would rise in the morning and make the breakfast, and that all the hard work through the day would come upon mother, and they seemed to think it was no concern of theirs that all the sewing for the family came upon her too. This one day was a picture of their life nearly the whole year through. The mother thought her girls were not strong; they did not often feel in good spirits; she did not wish to make drudges of them while they were young; let them take life easy while they could, they would find it hard enough by and by, poor things; she knew how it had been with herself, and so it would be with them. The father thought the girls looked as strongly made and healthy as the boys; they eat as much, and never seemed to be sick; but some how they never were of much use; though mother doubtless knew best what they should do, and what they should not; he was a very hard-working man, and had little time to think about such things; he supposed that they would turn out to be as good as girls in general, at least if they were as good as their mother, they would make very industrious wives for somebody yet. The boys were fine little fellows, and would be able to make their own way in the world—he felt proud of them.

And thus between these two weak parents, both weak, though in different ways, are those young girls growing up to womanhood with no other prospect than their mother's life of hopeless drudgery before them; for that is the end and aim of the mother's teaching when she says, "they will find life hard enough by and by." When will mothers learn what wickedness, what cruelty there is in such mistaken kindness? It should not be called kindness, for it is not. It is a sinful weakness for which mothers and daughters must pay a life-long penance,—happy, indeed, if the penance end with their life. And it is not a weakness which springs from love, if it were, it might be forgiven. What other feeling than selfishness ever prompted a mother to say, "I would rather my work should go half undone, than take the trouble to teach my daughters how to help me." Such language speaks not only a selfish regard for present ease, but a selfish, criminal neglect of the future welfare of your child. Love hopes and labors for a better and happier future, and shrinks not from present sacrifices that it may attain for its object a

greater good. More real love would make the number of weakly-indulgent mothers less, and give a nobler class of women to the future.

Health and Dress.

MR. EDITOR:—In the January number of the *Farmer* you complain of long articles for the Ladies' Department, and speak of putting some of them in the fire. [In compliance with the request of their authors.—Ed.] No doubt you have cause for complaint, for women are noted for their "much speaking;" and what you said might have been very well received, if you had not in the same number published a letter much longer than any woman would think of writing. I think this savors a little of partiality. [Dr. Schetterley's letter had been crowded out of two or three previous numbers by a "partiality" which induced us to give our lady correspondents the preference, even though we knew that by so doing we were withholding from them much good advice. We know it was conferring a great favor upon the Doctor to give him the privilege of speaking to our lady friends, though it was but once, and then for their benefit, as no doubt he, as well as we in the innocence of our heart, truly thought; but if they "with one consent" object to such "partiality," of course we won't be guilty of it again. The doctor must go over the leaf into the men's department, where, if the ladies do not read what is written, perhaps their husbands will read it to them.—Ed.] You ask for more variety in this department; so do I. I am heartily sick of this constant theme of work, work, work. But how can a woman who is required to work from weary "chime to chime" be expected to write on any other subject? If perchance she suspends her labors for a moment and sits down to read the *Farmer*, the first sentence that meets her eye is, "use more elbow grease, and less soap." The chief excellence of the letter referred to in your January number seems to consist in recommending American women to take more exercise. [Those who are suffering for the want of it.—Ed.] I see no propriety in comparing English ladies of fortune with American farmers' wives. [By reading that letter again our fair friend will find that it is with "gentlemen of Yankeeedom" the English ladies of fortune are compared, and not with farmers' wives at all. But, begging pardon for saying so much in defence of the Doctor and ourselves we promise not to interrupt our correspondent again.—Ed.] The former, when they have given orders to Bridget about the dinner, are at liberty to hoe in the garden or walk where they choose. But suppose the farmer's wife who is mistress of the mansion and "maid of all work," should go out and hoe, or walk till noon, where would be the dinner for husband and the hired men? [We promised not to speak again, but can't help wondering to ourself why we fail to discover the propriety or

reasonableness of this question, or what connection it has with the advice or suggestions of Dr. S. On the following subject *we are* mum.—Ed.] Let me mention to your fair readers *another* cause of disease which is far more fruitful than the want of exercise, or the "fat and potatoes" mentioned in Mr. Schetterley's letter. It is, gentle reader, your long, heavy skirts, so tight about the waist as to prevent free respiration, and often wet about the feet and ankles. All agree that these are unhealthy, but few have the courage to lay them aside. Nearly four years since, I adopted the Bloomer costume on trial, and I liked it so well I have *tried* it ever since; and I have often wished for the pen of a ready writer, that I might portray its advantages to farmers' wives and daughters, and persuade them to "go and do likewise." If city ladies who have nothing to do but lounge on the sofa and read the last novel, choose to wear long garments why should we ape after them, and bind ourselves with "burdens grievous to be borne," for fear of being thought unfashionable? Let us rebel against this tyrant *fashion*, and proclaim our freedom by dressing as becomes women who understand the invulnerable laws of health, comfort, convenience and economy. We can then not only perform our household duties with ease, but we can promenade the streets in something better than "shilling calicoes," without the fear of soiling our dresses or exposing our hose to the gaze of those we meet. But I have little hope of success with wives unless husbands can be induced to give their approving smiles. I presume you read this department of the *Farmer* (or your wives read it to you,) but I hear you say, "I don't concern myself about such small matters." Whether you are aware of it or not, I opine that the husbands are "few and far between" who do not exercise great influence in these very small matters. Then why not let it be on the side of health, comfort, convenience and economy, instead of frowning and hissing at every attempt to reform? Your wife does never perhaps ask you what she may wear; yet in the selection and style of her dress she does consult your tastes and wishes more than her own. How often has it been said to me, "I don't know what my husband would say if I should put on a short dress." A friend who made this remark to me, soon after heard her liege lord say that if she put on a Bloomer dress he would not tear it off, but the first time she took it off he would burn it. And yet he would think it far beneath the dignity of a man to dictate about his wife's apparel. "O, consistency thou art a jewel!" But "a word to the wise" is sufficient. And now, husbands, if you think this a very small matter, I have a very small request to make: it is, that you rise early to-morrow morning, and while your weary wife takes an extra nap, just slip on her heaviest quilted skirts and longest dress, and with a bowl full of milk in each hand run up and down

stairs a few times. If you do not have occasion to change your mind with your dress, I shall consider you one of the "wonders of the age." Please let us know the result

A FARMER'S WIFE.

Delta, Eaton Co., Mich., Feb., 1855.

ELLA, of Thornapple, is informed that *Dielytra Spectabilis* plants may be had of the nursery establishments in this city. The price is 50 cents each. Varieties of verbenas may be procured from any of the florists in the State.

In regard to "selected" articles for the *Farmer*, we would say to Ella, that we seldom find room in our pages for those upon purely literary or miscellaneous subjects. Sometimes selections are necessary on matters of practical importance, or in giving information upon topics with which our own correspondents are unacquainted; but original articles possess a home interest which generally induces us to give them the preference over selections, except in the instances above named.

We believe original communications suit our subscribers best, and our friends are liberal enough to give us a generous supply. And furthermore, we believe that a lady who has the taste and judgment necessary to make good selections, is capable of writing something original, which if not quite as elegant, will at least be twice as welcome.

Will not our friend make the trial?

Our books, and the numerous excellent exchanges we are favored with, furnish us with extracts, without the expense of paying postage for the sake of having them in manuscript.

MICHIGAN FARMER.

ROBERT F. JOHNSTONE, EDITOR.

DETROIT, APRIL, 1855.

A Sheep Shearing Festival.

The Agricultural Society of Washtenaw county have determined to hold a sheep shearing festival at Ann Arbor, on Wednesday and Thursday, the 6th and 7th of June. At the same time and the same place, there is also to be held a plowing match. The premiums to be given at each, and the rules and regulations adopted by the Society, and which are to govern competitors in both, have been forwarded to us by L. DAVIS, Esq., the Secretary of the Society, with the request that they shall be inserted in the *Farmer*. With this request we most cheerfully comply, considering it one of the special uses of the columns of the *Farmer*, to give publicity to all such announcements.

This sheep shearing festival is a new feature in the action of the Society, and though such meetings have been held in Vermont, and some other of the eastern States, this is the first attempt to hold one in Michigan. We have no doubt about its being successful, and it will unquestionably be the precursor of like meetings being held in other counties. Washtenaw has a very large interest invested in sheep and wool, and some of the finest wool in the world has been grown within her limits. It is, therefore, very proper that she should take the initiative. The festival being under the auspices of the County Society it will

possess a public interest and importance which will unquestionably attract wool dealers and sheep breeders from all quarters. The connection of the plowing match with the sheep shearing Festival, we regard very favorably. The plowing matches of most societies are held at the time when the annual fair is held, and appears to be only a secondary portion of the programme, to which but little importance is attached. There is not as much interest felt in the trial of the performance of plows at them as there ought to be. The holding of a plowing match in June, and giving it the importance it deserves, we are of opinion will have a very great tendency to establish a better knowledge of what is requisite in this kind of work, and prove highly beneficial. We would suggest the propriety of adopting a series of regulations to govern the competitors at the plowing match; as the rules being once well understood, there will be less cause for dispute when the match comes off. We would also suggest this plowing match as being a proper occasion at which may be tested the qualities of the various kinds of implements, such as cultivators, seed sowers, corn-planters, seed-drills, &c. We have no doubt if inducements are held out, that manufacturers will be on hand with their articles.

PREMIUMS to be awarded at the Sheep Shearing Festival and Plowing Match, to be held at Ann Arbor, on Wednesday and Thursday, the 6th and 7th of June, 1855.

	Premiums—1st, 2d, 3d, 4th,
For the best specimen of Wool from one Buck, 4 years old or over,	5 4 3 2
For the best specimen of wool from 1 Buck, 2 years old or over,	5 4 3 2
For the best specimen of wool from 3 Ewes, 4 years old or over,	5 4 3 2
For the best specimen of wool from 3 Ewes, 2 years old or over,	5 4 3 2
For the best specimen of wool from 3 Buck Lambs,	4 3 2 1
For the best specimen of wool from 3 Ewe Lambs,	4 3 2 1
For the best specimen of shearing of Ewes, to be performed in thirty minutes, or of Bucks in forty-five minutes,	5 4 3 2
For the best specimen of Shearing performed in the least time,	5
For the specimen of Wool in the fleece, put up in the best and most economical manner,	2
Committee —Robert Home, Ann Arbor; Henry Warner, Dexter; Allen Buck, Ypsilanti; J. G. Leland, Northfield; J. P. Gillett, Sharon.	

PLOWING MATCH.

For the best specimen of Plowing not less than $\frac{1}{4}$ nor more than $\frac{1}{2}$ of an acre, with one span of horses, eight inches deep,	10 7 4
For the best specimen of Plowing, not less than $\frac{1}{4}$ nor more than $\frac{1}{2}$ of an acre, with one yoke of oxen, seven inches deep,	8 5 3
For the best specimen of Plowing, not less than $\frac{1}{4}$ nor more than $\frac{1}{2}$ of an acre, not less than ten inches deep, with any team,	12 9 6
For the best Plow for doing work not less than eight inches deep, reference being had to lightness of draught and manner of work done,	8
Committee —William Wilson, Ypsilanti; Seth Thomson, Salem; Robert Campbell, York; Justin Kellogg, Pittsfield; Allen Crittenden, Pittsfield.	

RULES AND REGULATIONS, to be observed at the Sheep Shearing Festival, to be held at Ann Arbor, on Wednesday and Thursday, the 6th and 7th days of June, 1855.

Any person to compete for the premiums offered, must become a member of the Washtenaw County Agricultural Society, by paying one dollar to the Treasurer, which will constitute him a member during the year, also the additional sum of 10 cents per head for Ewes and Lambs, and 25 cents per head for Bucks entered for the premium; each animal to be weighed, numbered and registered; to be shorn in presence of the Committee, the fleece left for inspection, weighed, and numbered to compare with the number of the sheep.

Premiums to be awarded for the greatest quantity and the best quality of wool in its marketable condition, produced from sheep in proportion to their live weight of carcass, reference being had to their age and symmetry of form; and upon satisfactory evidence being furnished to the Committee that the wool is of one years growth only; and if a ewe whether she has or has not borne a lamb the present season; which shall be taken into consideration. If any sheep are presented bearing wool of two years growth or over, double the quantity will be required, and so in proportion to the time exceeding one years growth.

Any sheep or fleece of wool on exhibition, if removed previous to the awards being declared, shall forfeit their right to any premium.

Shearers who compete for premiums must become members of the Society.

Meteorological.

REVIEW OF THE WEATHER FOR FEBRUARY, 1855.

BY L. WOODRUFF, ANN ARBOR, MICH.

The monometer at...	7 A. M.	2 P. M.	9 P. M.
Highest temp. in month, 35°	(18th)	38°	(13th)
Lowest " " "	-24	(24th)	3
Average	11	32	15
Monthly mean,			16.7

MONTHLY VARIATIONS.

Greatest daily mean,	38.6°	(13th.)
Least,	5.6°	(8th.)
Greatest daily range,	42°	(24th.)
Least " " "	2½°	(14th.)
Clear days,	6	
Part clear,	7	
Cloudy days,	16	
Days on which rain fell,	3	
Total amount of rain and melted snow,	2.30 in.	

W. N. D. S.
W., 5 days; N., 4 days; E., 4 days; S., 1 day; S. W., 6 days; N. W., 8 days; N. E., none; S. E., none.

REMARKS.

For steady severity of weather this month has rarely been equalled in this portion of our State. The mean temperature of the first ten days, at 7 A. M., was only 2½ degrees. The last eight or ten days of the month were also very severe. The minimum temperature of the month was observed at 6½ A. M. of the 24th, when the thermometer indicated 25 deg. below zero. It speedily moderated, however, and the range that day was very unusual. The temperature on the morning of the 6th was 19° below zero, and the day throughout was very cold.

A heavy rain occurred on the 13th. The average depth of snow during the month varied from 12 to 16 or 18 inches. Snow fell on 12 days.

Below are the means of temperature, &c., for the season ending Feb. 28, 1855, compared with the same period of last year.

MEAN TEMPERATURE OF THE WINTER AT				
	7 A. M.	2 P. M.	9 P. M.	Mean of season, 22.6°
(1855.)	14.2°	27.5°	21.6°	" 24.8°
(1854.)	30.6°	29.3°	24.3°	" 24.8°

Total amount of rain and melted snow for the season ending Feb. 28, 1855, 6.54 in.
ending Feb. 28, 1854, 4.33 in.

A Hand Corn Planter.

The owner of a patent right of a new hand corn-planting machine called upon us a few days ago, with his machine, to exhibit it; and so far as we had an opportunity of examining and testing it, the article left a favorable impression. The form of the implement, when carried from hill to hill of corn, is very well portrayed in the cut marked No. 1, where it will be noticed that the wedge-shaped steel spade planter is closed. In cut No. 2, the implement is represented as it appears when dropping the seed. The handle slides up and down, and by its action measures out the seed to go in the hill, and stops the supply from being more than enough. The box or hopper, in which the seed is carried, is about two feet long, and four inches on each side. It will contain from two to three quarts of corn, and when filled, it will not weigh over five or six pounds. With a little practice, a man might

plant as fast as he could walk, without stooping; and Mr. Kinne of Ypsilanti, who has the right for this State, is of the opinion that with a little contrivance, two of them may be attached to a horizontal bar, and two rows planted at a time. We think, however, this would be too severe work for any ordinary sized man, to be kept up for all day. We do not say that this invention is the *ne plus ultra* of corn planters, but it is certainly very superior to any that have yet come under our notice, and we take pleasure in calling the attention of farmers to it, as a cheap, valuable machine, which may be found useful and economical, and not liable to get out of order; and easily remedied when it does. This is the kind of implement called for by farmers.

We refer to Mr. Kinne's advertisement for further information.



Sawdust.

A correspondent makes some inquiry as to whether sawdust could be used as a manure. He states that a large quantity is beside him, which has been turned out of a steam saw mill. We answer that it can be used with very great service, first as one of the very best articles we know of with which to mulch fruit trees, currant and gooseberry bushes, and quince trees, which may be apt to suffer from drought. Secondly as a substance which possesses a power to absorb and retain the fertilizing properties of the urine or drainings of stables and cow houses, it is unrivalled, and it may be used as a bedding for animals with much more profit than to be put on land by itself. But even when used simply by itself, it will be found a most excellent ameliorator of stiff clays; and when spread upon sandy soils, it will aid materially in preventing the effects of dry weather, and where clover has been sown and plaster used, the growth of the crop will be materially promoted. Let our correspondent try it on a half acre of sandy soil, with eight or ten two horse wagon loads evenly spread, and report progress next fall. But we do not recommend the use of sawdust by itself, because that really is not using it as economically or as usefully as by taking it into the cow yard, the hog yard or the stable, and letting it absorb much of the most valuable manure, which is generally dissipated and lost, and which also aids to promote the decomposition of the particles of wood of which the sawdust is composed, and to make it sooner available as food for the growing plants. If any one has ever noticed how the long slender fibres of the roots of growing plants will cling to a rotted chip, he will have some idea that the roots of growing plants will just as readily seek half decomposed sawdust, which is only the same material, reduced to finer particles, and gather food and strength from them. We say of sawdust, just as we would say of wood ashes, do not let a bushel go off your land.

Wool Depot.

Mr Walter Chester, of Detroit, it will be seen, offers his services, and his store for the sale and storage of wool during the coming season. The depot of wool in some convenient place, where it could be examined, sorted or kept ready for the inspection of buyers ought to be a great convenience to farmers. It has been tried at the east and found to work well. Besides the system itself is right and just to the wool grower who takes pains to raise fine wool and bring it to market in good order, and he is not put on par with the slovenly farmer whose wool is neither fine nor clean. During the past season, a depot was established at Cleveland, which was found to work well. There is no reason why such a depot should not be established here, and be of great benefit to wool growers and country merchants, and thus be the means of bringing buyers here instead of having to send wool eastward, before finding a purchaser. Mr Chester is well qualified for this business, and his character as a merchant in this city stands very high.

We saw some splendid Braham Pootra fowls at the Express Office a few days ago, wending their way from the east and directing their course westward. The coop in which they were enclosed was labeled A. F. Moon, Paw Paw.

SHORT HORN BULLS.—It will be seen by the advertisement, that John R. Page, of Sennet, in Cayuga county, offers for sale, some thorough-bred short horn bulls of good blood, and of the *Splendor* family.

BROOD MARES.—We have heard a suggestion thrown out in relation to brood mares, which it may be well for farmers to notice at this season. It is said that experienced Kentucky breeders of horses never permit their brood mares to run in clover for fifteen or twenty days before being covered, nor for a month afterwards; either because clover has the effect of so relaxing the system of the animal, or from some other cause, that barrenness results from feeding upon it. Would it not be well for farmers to note this, and observe whether this may not be the cause of their mares missing to have colts, to the very great disappointment and loss of their owners.

In this connection it is proper to call the attention of farmers living in the neighborhood of Ann Arbor, to the advertisement of the *Black Hawk* and *Morgan* horses, in this number. These animals are conceded to be of the right stock.

The farmers of Oakland, Wayne, and the counties within convenient reach of the city are asked to read the advertisement of Messrs. Backus and Eldred, where they state the places at which their celebrated horse Jackson will stand during the present season. Attention is also called to the premium they offer for the best colt in 1859. We are well aware that Jackson is the last surviving son of the celebrated trotter Andrew Jackson, and that he is one of the best and surest getters of colts. From an acquaintance with him for the past year, we have nothing to take back from the opinion we have heretofore expressed.

REAPING AND MOWING MACHINES.—In the present number of the *Farmer* will be found the advertisements of no less than five varieties of Reapers and Mowers. Manny of Rockford, in Illinois, offers his celebrated machines for trial. Atkins' Automaton Reaper is also offered for sale by the patentee, Mr. Wright of Chicago. Mr. Fisher the agent, for Seymour and Morgan's machine is on hand and ready to supply that machine to purchasers, and also Ketchum's very excellent mowing machine. The agent of Palmer and Williams came along at a late hour, and asked that he might be put on an equality with the others, and we complied with his request. It will be remembered that we published in the January number the offer of Messrs. Palmer and Williams to contribute one of their machines, to pay the expenses of a trial before a committee appointed by the State Agricultural Society, during the coming season. This offer has not yet been accepted. Meanwhile we ask our readers to turn to the advertisements of each, and read them all carefully before making a selection.

CRANBERRY VINES.—We have received a most excellent communication from L. D. HALSTED, through the hands of our agent at Coldwater, C. P. BENTON, Esq., on his cultivation of the cranberry, which we very much regret it was wholly impossible to publish this month, being received too late. Mr. Halsted writes us that he has quite a patch of cranberries of a variety which he received from Minnesota in 1852, and which outgrows the wild grass on his marsh. These vines he will sell at the rate of two shillings for a sod a foot square, delivered at Coldwater, in Branch county. From a square rod of these vines he picked, last fall, a bushel and a half of berries. His article will appear next month. His address is Coldwater, Branch county. As we have received several questions as to where cranberry vines could be purchased, we just manage to squeeze this piece of information in this number by way of circulating this answer, and also to acknowledge the attention of Mr. Benton.

OUR NORTHERN AGENT.—We have appointed Mr. Francis M. Drake, the agent for the *Farmer* to visit the counties of Genesee, Lapeer, Tuscola, St. Clair, Macomb, and others, for the purpose of settling all old accounts with subscribers, post-masters and agents. He is also authorized to receive subscriptions. We bespeak for Mr. Drake the good offices of our friends, and any information which may be given to aid him in the transaction of the business he has on hand will be considered as though rendered ourselves personally. Mr. Drake will also make notes of any matter, or on any subject to which his attention may be called by those interested in promoting agriculture, which he will transmit to us for publication.

The Illustrated Annual Register of Rural Affairs, and Cultivator Almanac for 1855. Price 25 cts.

We are guilty of negligence to our readers for not earlier calling their attention to this excellent little manual. The first twenty pages are an almanac; the following one hundred pages are filled with the choicest matter on nearly every subject of rural interest, beginning with country dwellings, one of the most interesting subjects of the present day, with many illustrations of dwellings, followed by short chapters on planting grounds, flower gardens, trees, (illustrated), climbing plants, culture of fruit, with entire management of trees, soils &c., outbuildings, with plans, construction of cisterns, improvement and treatment of animals, farm management &c. &c. Altogether it is one of the choicest, most useful works we have laid eyes on for many a day. Prepared by J. J. Thomas, and published by Luther Tucker, Albany, N. Y.

C. P. of Geneva, Van Buren Co., makes inquiry as to whether cement or water lime plaster spread on the walls of a cellar dug out of the soil would keep water out? We think it would not; for the reason that having no wall or solid substance to support it, the plastering, no matter how thick it might be laid on, would be liable to crack with the pressure of the water from the outside. Cellars and cisterns are made water-tight, however, by the use of water lime mortar well made, and the floors of both are made altogether from water lime mortar. Mr. A. B. Markham, of Mead's Mills, has walls and partitions of mortar and gravel or sand. We think his plan would just suit C. P., who says neither brick nor stone are to be had in his vicinity. Any information relative to making cellars water tight, will be received with pleasure.

Letters and communications have been received from James Thompson, Joseph Stephens, J. A. Polhemus, T. J. C., L. T. E., C. Treadwell, John Reed, New Subscriber, A. B. Markham, in defense of his position on the chess question. S. Lamb, on poultry. "Cosmopolite," on poultry. D. D. Tooker, on Australian wheat; which shall appear next month.

PURE BREED SHORT HORNS.—We have received the circular of Dr. Herman Wendell, who is breeding some pure short-horns at his farm of Hazlewood, five miles south of Albany, New York. His short-horns are from the herd of the celebrated Mr. Thomas Bates, of Kirkcaldy.

HORSE CORN PLANTER.—Mr. Andrews, of Pontiac, has placed in our hands a number of letters showing the estimation in which the corn-planter, which he manufactures, is held. We recommended this planter in several cases last year, and in each of them, the implement was found worthy of what we said about it. In our next number we will try and make room for some of their notices. Meanwhile we ask attention to the advertisement.

Mr. Andrews, desires us to say that he offers a premium of one of these machines to the farmer that will grow the largest crop off an acre of corn planted with one of these corn planters, the next season, to be awarded at the State Fair.

We have received the circular of Cochran's Commercial Institute in this city, by which we perceive that the principal has opened a department for the instruction of ladies in the art of book-keeping. This department is under the supervision of Mrs. C. E. Cochran. As this is a branch of education which ought to be as necessary for one sex as the other, we are very glad to call attention to this new feature in the Commercial Institute.

LYON'S COPPER LIGHTNING CONDUCTOR.—Among the new patents of last year we see noticed Lyon's Copper Lightning Conductor, for which is claimed a superiority over all other conductors of a like kind, on account of the large surface exposed to the electric fluid, the power of the material to conduct, for durability, for mode of connecting, for stability, and also in point of economy. E. B. Holmes, of this state, is agent for Michigan.

L. G. Morris Esq., of Mount Fordham writes us that he will have the catalogue of his annual sale of blood stock ready by the first of April. Mr. Morris both lets or hires out his animals, as well as sells them. He has in his herd some of the best blooded Shorthorns that has ever been brought to the United States.

HORSE POWER.—We call attention to the advertisement of the Messrs. Emery, in this number of the Farmer. Their Horse Power and Thresher is a most economical machine for farmer's use. They have been a long time in the business, and are well prepared to give satisfaction to those who deal with them.

BIRMINGHAM IRON WORKS.—It will be seen that A. Smith and Son, of Birmingham, are prepared to execute orders for the Michigan jointer plow, Starbucks plow, corn planters, Field rollers, stump screws, cross cut saw mills, cider presses, and other machinery needed by farmers.

CORRECTION.—In the recipe for curing hams in the January number, page 11, read 8 oz. salt-petre. A correspondent calling attention to the error, sends us another recipe for the same, which shall appear soon.

"BROWN" CORN WANTED.—James A. Polhemus, of Marshall, wishes to know where he can get seed of the above variety of corn, for the coming planting. Those having the article for sale can inform him of their terms by letter.

SHAKER SEEDS.—The enterprising firm of druggists and grocers, Higby and Dickinson of this city have received a fresh lot of Shaker garden seeds, which they advertise this month.

THE TOLEDO NURSERY ASSOCIATION.—It will be seen that the Toledo Nursery Association offers a fine collection of fruit trees and ornamental plants for sale. They have also on hand cuttings of osiers, for which there are many inquiries made by correspondents.

The advertisement of A. De Forest, of Ann Arbor stating that he has for sale fresh Clover, Timothy, Redtop and Fowl meadow grass seed as well as Parker's celebrated garden seeds for sale, was received too late for insertion in this number.

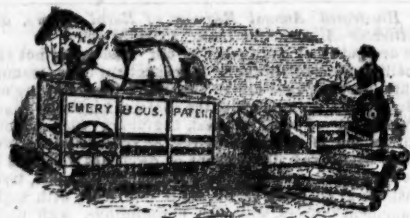
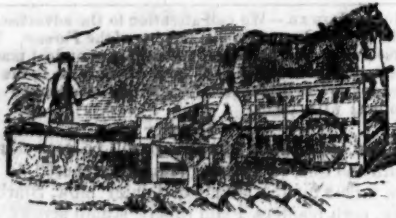
DEVON COWS FOR SALE.—C. M. Crippen of Coldwater, Michigan, informs us that he will sell four or five of his herd of Devon cows. This is an excellent opportunity for those who want such fine animals.

SALMON'S SEPARATOR.—We call attention to the advertisement of Salmon's Seed Separator. We have not as yet seen this machine work; but it comes before the Michigan farmers with very strong recommendations.

POSTAGE.—After the first of April, every letter put in any post-office, must be prepaid by stamp or otherwise, or it will not be forwarded to its destination. Let our readers note this.

Markets.

The market for the present month show that the rates for wheat, corn, oats and flour, have been changed but very little. Flour is selling in this market at \$8.00 to \$8.25 for good white wheat manufacture. White wheat is worth \$1.70 to \$1.75. Corn sells at 62 1/2 cents. Oats are worth 40 cents. Beef cattle have advanced during the month, and butchers are now paying 4 cts to 4 1/2 cts for common to good animals, extra fat are worth 4 1/2 cts a live weight. Fat wethers bring from \$4.50 to \$5.00 per head. Mutton on the carcass sells at 5 cts to 6 cts. per pound. Hogs are sold at from \$5.00 to \$5.25 dressed. Veal calves range from \$2.50 to \$5.00 each. Butter is higher, and sells at 23 cts. per pound for fresh roll. Clover seed is selling in this city at from \$7.00 to \$7.50 per bushel. Timothy of the best quality at \$3.00. Red Top at \$1.75. Fowl meadow grass seed at \$4.00. Osgood plaster at \$1.00 per barrel. Grand Rapids plaster at \$1.50 per bbl., and ground plaster in bulk delivered at the mills at \$7.00 per ton. Water-lime is worth \$1.50 per bbl. Fine salt \$1.75 per bbl., and coarse \$3.00 per cask. Hay from \$16 to \$20 per ton. Freight to Cape Vincent and Ogdensburg are 50 cents per bbl. for flour, and 75 cents per bbl. for pork. To Buffalo and Dunkirk it is generally thought wheat will be worth 7 to 8 cents on the opening of navigation. Corn 61 cents, and flour 75 to 80 etc. No engagements have as yet been made.



ALBANY AGRICULTURAL WORKS, ON HAMILTON, LIBERTY AND UNION STREETS; WAREHOUSE AND SEED STORE, REMOVED TO No. 52 State Street, Albany, N. Y.

The Proprietor, of the above named establishment being the sole owners and manufacturers of
EMERY'S PATENT HORSE POWER, &c.,
(All arrangements with other Parties for their manufacture having expired,) have formed a new co-partnership, under the firm name of
EMERY BROTHERS.

And will continue the manufacture and sale of AGRICULTURAL IMPLEMENTS and MACHINERY, as heretofore, at the old stands of EMERY & Co. By this arrangement the united efforts and interest of the Brothers, long known to the public, are secured, and no exertions will be spared to meet the wishes of those dealing in and using the class of implements they manufacture—their leading branch being the manufacture of the justly celebrated

Emery's Patent Changeable Geared Railroad Horse Powers,

With the machines to be propelled by it, as Threshing Machines, Saw Mills, and Machinery generally. These Powers having been submitted repeatedly to the most severe tests and trials to determine their relative merit and utility, with those of any known manufacturer, have without exception been awarded the highest prizes for superiority—among which were the following:

WARRANTY, CAPACITY, ECONOMY, &c.

N. Y. State Ag'l Society, 1854, 1853, 1852, 1851, 1850.
Ohio State Board of Agriculture, 1854, 1853, 1852, 1851.
Michigan State Agricultural Society, 1853, 1852, 1851.
Indiana State Agricultural Society, 1853.
Illinois State Agricultural Society, 1853.
Pennsylvania State Agricultural Society, 1853.

Maryland State Agricultural Society, 1853.
Missouri State Agricultural Society, 1853.
American Institute, 1852, 1851.
New York Crystal Palace, 1853.
Canada Provincial Society, 1852, 1851.
Connecticut State Agricultural Fair, 1854.

The Two Horse Power and Thresher is capable, with three or four men, of threshing from 175 to 225 bushels of wheat or rye and the ONE HORSE POWER from 75 to 125 bushels of wheat or rye; or both kinds of powers, &c. are capable of threshing double that amount of oats, barley or buck-wheat, per day, of ordinary fair yield. If the crops be extraordinarily heavy or light, greater or less results will follow.

These Powers, Threshers, &c., are warranted to be of the best materials and workmanship, and to operate as represented by this Circular, to the satisfaction of the purchasers, together with a full right of using them in any territory of the United States, subject to be returned within three months, and home transportation and full purchase money refunded if not found acceptable to purchasers.

The public may rest assured the reputation hereto earned for our manufacturers, shall be fully sustained, by using none but the best material and workmanship; and by a strict attention to business, they hope to merit and enjoy a continuance of the patronage heretofore so liberally bestowed, which we respectfully solicit.

N. B.—All articles bear the name of "EMERY" in raised letters upon the cast iron parts, and however much others may resemble them, none are genuine without this mark.

Full descriptive illustrated price Catalogues sent gratis on application.
Albany, N. Y., April, 1855.

EMERY BROTHERS.

EGGS AND POULTRY.

THE subscriber offers for sale, on reasonable terms, EGGS and CHICKENS, from the following varieties of pure bred Fowls: COCHIN CHINAS, from the Premium Coop entered as foreign stock at the last State Fair, by G. W. Fox, of Mansfield, Ohio. DRAMAH FOOTRAN, from D. P. Jewell's premium stock, of Rochester, New York. SUMATRA PHEASANT GAMES, WHITE SHANGHAES, BLACK SHANGHAES, SPECKLED DORKINGS, BLACK SPANISH, WHITE BANTAMS.

The above are all warranted pure, and of the best stock in the country. Orders addressed to me, and a company with the money, will be promptly attended to; and letters of inquiry, post paid, thankfully received. Prices of Eggs ranging from \$2 to \$3 per dozen, and Chicks from \$5 to \$10 per pair, according to kind. Troy, Oakland co., Mich. April, 1855. [H] E. H. CRESSY.

SHAKER, FIELD AND GARDEN SEEDS!

WARRANTED FRESH AND GENUINE!

**HIGBY & DICKINSON,
DRUGGISTS,
No. 145 Jefferson Avenue, DETROIT.
AGENTS FOR THE NEW LEBANON SOCIETY.**
April 1, 1855. [21]

LAND AND STONE QUARRY FOR SALE.

THE undersigned will sell the following parcels of Real Estate, separately or together, to suit purchasers, viz: 22½ acres of excellent farming land half improved, North of the Adrian and Jackson Branch R. R. and adjoining the Depot Grounds; Also 20 acres South of H. R. and adjoining village plat; Also the undivided one half of 64 village lot and the entire in erect in 16; Also 37 6-7 acres of the best stone quarry in the State, half a mile from the Depot and adjoining the village of Napoleon, together with a large stone business; Also 30 acres of excellent pasture and meadow land, adjoining the quarry and the village; Also 2 village lot with a large stone house and frame barn.
Napoleon, April, 1855. [H] I. H. JONES.

THE PROGRESSIVE FARMER,
The Cheapest Agricultural Paper in the World!
[EIGHT] pages royal quarto, handsomely embellished. Price 25 cents per annum. A. M. SPANGLER, Editor, Office, N. E. corner 7th and Market sts., PHILADELPHIA. [ap-24]

**1854. FARMER'S WAREHOUSE. 1854.
D. B. & G. C. BURNHAM,
Dealers in all kinds of Agricultural Implements, Garden and Field Seeds, Salt, Plaster and Water Lime.
Warehouse near Railroad Depot, BATTLE CREEK, Mich. [oct-42]**

FLOUR CORN.—We have to acknowledge the receipt of a box with some ears and a small bag of meal made from D. D. Tooker's flour corn, from which a Johnny-cake was made in the most approved mode. The cake was eaten, and we found that it was very good, and sweet. Judging from this, the flour made from this corn must be very nutritious. The corn is white, and makes a very fine smooth meal, with less grit than the common corn.

CULTIVATOR AND CULTIVATOR TEETH.—The spring is upon us, and it behooves every man to be prepared to meet its requirements. Among the implements required for use as much as any other, the cultivator comes almost directly after the plow and the harrow. We call attention therefore to Mr. Flowers advertisement, who is engaged in the manufacture of the improved teeth and wheel cultivation, invented by D. B. Royers, and whose machines and teeth are found durable and capable of doing excellent work.

ERROR CORRECTED.—Mr Colby, the inventor of a machine for peeling basket willows lives in Jonesville, Vermont, instead of Coldwater as was stated in our March number. The mistake was made by copying the notice from a Cold water paper.

More Bounty Lands!



BY AN ACT OF CONGRESS, passed March 3, 1855, ALL Officers and Soldiers who have served FOURTEEN DAYS in any war in the United States, since 1776, are entitled to 160 acres of Land, if they have not received it. Those who have received 40 or 80 acres, are now entitled to enough more to make up the 160. Those who have received 160 acres are not entitled to any more. The benefit of this act extends to the widow and minor children of the soldier, but to no other hel. Those who have been engaged in BATTLE are entitled to 160 acres, without regard to the period of their service.

Those soldiers of the Black Hawk, Patriot, and other wars, who served LIVES than one month, are now entitled to land.

Persons having claims under this, or any other act, will have them promptly attended to by calling on, or writing to

DAVID PRISTON & CO., Bankers,
130 J.erson Avenue, Detroit.

P. S.—We have faithful and experienced Agents in Washington, and we make no charge in any case unless we obtain the land.
Detroit, April 1, 1855. (3m)



Bounty Lands!

REVOLUTIONARY WAR! WAYNE'S WAR!
WAR OF 1812! FLORIDA WAR! AROOS
TOOK WAR! BLACK HAWK WAR! PAT
RIOT WAR! MEXICAN WAR!

ALL Officers, Soldiers, or Musicians in the Army, or Seamen, Master, Cooks or Landmen in the Navy, who were engaged in any of the above wars, or their widows, or minor children, are now entitled to 160 Acres of Land, unless they have received it. If they have received 80 or 40 acres, they are entitled to the residue.

Warrants procured by the subscriber,
HENRY R. MIZNER, Land Agent,
No. 39 Griswold street, adjoining Michigan Insurance Bank.
Detroit, April, 1855. (3m)

SHORT HORN BULLS.

I HAVE for sale three young thoroughbred SHORT HORN BULLS; aged four months, seven months, eighteen months; colors—roan, red, chiefly red; the get of SPENLOD, a son of Vane Tempest and imported Wolsiston. JOHN R. PAGE,
April 1, 1855. (3f) Sennett, Cayuga Co, N.Y.

Darling Sweet Corn.
WE have on hand several bushels of DARLING'S SWEET CORN, the earliest sweet raised. Farmers wanting it to sow for seed, will be supplied on reasonable terms.
[ap 2f] D. O. & W. S. PENFIELD.

Old Colony Sweet Corn.
SEVERAL BUSHELS of an extra quality, of this superior Sweet Corn, for sale by [ap 2f] D. O. & W. S. PENFIELD.

Early Dutton Corn.
A LARGE supply of EARLY DUTTON SWEET CORN—extra fine—for sale by [ap 2f] D. O. & W. S. PENFIELD.

PALMER & WILLIAMS' PATENT PREMIUM SELF-RAKING REAPER.

GANSON, HUNTLEY & Co.,
OF BROCKPORT, N. Y.

ARE now manufacturing 600 of these superior REAPERS for the harvest of 1855.

They are using the very best materials, employing the best workmen, and adding such improvements as four years' experience in their use, and watching their operation in the hands of hundreds of practical farmers have suggested.

THE ADVANTAGES OF THIS REAPER ARE

1. It has the least possible amount of gearing to do the work of a man in raking off.
2. It is strong and durable.
3. Ease of draft, the main wheel being 4 feet in diameter.
4. It can be raised or lowered to cut from 4 to 18 inches from the ground.
5. It cuts 6 feet wide.
6. Does the work WELL by slow or fast driving.
7. Is easily turned round and has little if any side draft.
8. The reel being overhung and having no reelpoint next to the standing grain. It can cut and rake off lodged or tangled grain better than any other Reaper.
9. The grain is raked off entirely out of the way of the team in passing around the next time and laid in better shape for binding than can be done by hand. This Reaper took the first and highest premium at the great trial of Reaping Machines, by the Illinois State Agricultural Society.

CERTIFICATES.

From the Weekly Democratic Press, Chicago, (Ill.) Oct. 14, 1854.

The Self Raker of Palmer & Williams', of New York State, which competed with Atkins' Self-Raker, at Bloomington, is a specimen of substantial workmanship and durability; it cuts six feet in width. It may well be called "OLD SHARK MOUTH," for the way it pounces upon the unsuspecting bundle and sweeps it from the platform. Mr. Smith, a large farmer of Morgan county, assured us that he cut 100 acres heavy wheat in 5 consecutive days with one of these machines, and the work was done in the most perfect manner.

From the Brockport (N. Y.) Journal, July 27, 1854.

PALMER & WILLIAMS' SELF-RAKING REAPING MACHINE.—We don't believe that a more accurate and efficient Self-Raker can be constructed, or one that will answer all purposes to better advantage than Palmer & Williams' Self-Raking Reaper. They are made faithfully, able to stand considerable binding and do their business like clock work. Messrs. Ganson, Huntley & Co. manufactured 304 of these machines for the present season—and they are now disposed of to good advantage. Any person seeing the operation of this machine can but readily acknowledge its superiority and efficiency over the old fashioned Reaper or Cradle.

Dr. E. H. MIX, of Brockport, N. Y., is the General Agent for Indiana and Michigan, to whom orders from those States should be sent very early in the spring to secure a Reaper. "First come first served." Send in your orders.

Prices at the Factory; with extra sockets, sections, extra guards, wrenches, oil can, &c., is \$140 00. E. H. MIX.
Brockport, Monroe county, N. Y., April, 1855.

FIELD AND GARDEN SEEDS,
WINTER AND SPRING WHEAT AND RYE,
BARLEY, OATS AND BUCKWHEAT,
INDIAN CORN OF DIFFERENT VARIETIES,
CLOVER AND GRASS SEED, FLAX SEED,
Peas and Beans, Potatoes, Beets,

CARROTS, RUTA BAGA, ONION, CABBAGE,
PARSNIP, TURNIP, SQUASH, MELON,
and Cucumber Seeds,
and all other varieties required for the farm and Garden, at
D. O. & W. S. PENFIELD,
103 Woodward Avenue Detroit.

STAMBUCK'S PLOWS—of all sizes.
RUGGLES, NOURSE, MASON & CO.'S PLOWS.
CORN CULTIVATOR—with Reverable Steel Teeth.
HARROW'S—Geddes' Scotch.
ROAD SCRAPERS.
CORN PLANTERS.—Emery's, McFarlane's, &c.
OX YOKES.
KETCHUM'S MOWING MACHINE.—\$115, and freight.
NEW YORK REAPING MACHINE.—Price \$145 & freight.
CHAIN PUMP, with Galvanized Tubing, all fitted ready to put in the well, any length, at D. O. & W. S. PENFIELD'S.
[ap 4f] 103 Woodward Avenue.

BLACK HAWK —AND— MORGAN STALLIONS,

Will stand for Mares the season ensuing, in the city of Ann Arbor, near Cook's Hotel, commencing early the coming Spring.

BLACK HAWK

WAS seven years old the fifteenth day of June last; is over sixteen hands high, a bright Bay; was sired by the horse owned by David Hill, Bridport, Vermont, out of a Messenger mare. He comes in beautifully and speed with great strength, and as a trotting Stallion the undoubted best in the examination of all breeders, and any Test that may be desired by those who wish to try the speed of Trotting Horses.

THE MORGAN HORSE

Was six years old the fourth day of July last, dark chestnut, over fifteen hands high, and was sired by old Gifford Morgan, out of a Magnum Bonum Mare. For perfect symmetry of form and beauty of action this horse is not excelled.

The Horses have been brought to this State for the purpose of really improving the breed of Horses, and all the subscriber desires is, that those interested in raising good stock will call and examine the Horses for themselves.

The subscriber can be found at all times at Cook's Hotel, Ann Arbor, where any information desired can be obtained.
Ann Arbor, April, 1865. [3m] JAMES B. NEWLAND.

Seeds of Choice Fruits for Grafting,

SUPPLIED in large or small quantities, embracing selections from over 200 varieties of Apples, Pears, Plums, and Cherries. With the exception of Pears, (of which, out of some 40 varieties, only a few have as yet fruited,) the others will generally be taken from bearing trees. Apples 25c per dozen of each variety, or \$1 per hundred. Pears, Plums, Apricots, and Cherries, 37½c per dozen of each variety, or \$2 60 per hundred. Cuttings of Grapes, Houghton's Seedling Gooseberry, Red and White Dutch, Champagne and Black English Currants 25c per dozen of each sort, or \$1 per hundred. Small samples embracing 50 sorts, at \$5 to \$10. Where a number of seeds of the more plentiful sorts are wanted, they will be supplied at reduced prices. Small parcels may be sent by mail.

FRANCONIA RASPBERRY CANES—Very productive, profitable for market. Price \$1 per dozen, \$6 per hundred, \$50 per thousand.

HOUGHTON'S SEEDLING GOOSEBERRY, (true)—Hardy, productive and good; always free from mildew.—25c each, \$2.00 per dozen—straw packing—\$5.50 per dozen, for 100 plants.

APPLE SEEDLINGS—One year old, \$3 per thousand.

STRAWBERRIES—Burr's New Pine, Crimson Cone Cincinnati Hudson, Prof. de Hantbol, Black Prince and White Wood. Price 25c per dozen, \$1 per hundred.

SEED POTATOES—Early and late sorts, including fifteen choice varieties, as Hull's Jubel, Early May, Ash K. J. C. Carter, Black Pink, York, Black Imperial, White Merer, Yam, Mexican W. I. Rough Purple C. Hill, &c. Price from \$1 to \$3 per bushel, R. P. Hill \$2 per bushel. (See Farmer for Dec. 1864.)

Each parcel will be carefully packed, marked and delivered at the Express office, Railroad depot, or otherwise, as directed—after which they will be at the risk and expense of the purchaser.

Orders should be sent as early as possible, and accompanied with a remittance. Money promptly returned by mail, when unable to fill orders.

[mar]

A. G. HANFORD,
Waukesha, Waukesha Co., Wis.

MORE CHOICE SEEDS FOR FARMERS & GARDENERS.

BY MAIL, RAILROAD OR EXPRESS.

Mexican Wild Potatoes, at \$1 per bushel—warranted genuine.
Early June " 40 cents per bushel—these are very early.
Scotch Muscovy potatoes 50 cts. per bushel—a premium potato.
Mercer, three varieties, 50 cts. per bushel—two years from the ball.
Poland Oats—highly recommended; 50 cts. per bushel of 10 pounds.
Flour Corn, the only true substitute for wheat, 25 cts. per quart.

All the above will be delivered at the Railroad, without extra charge, nicely put up in stout stout sacks and directed according to order.

A paper of any of the following named seeds will be sent by mail, free of postage, to all post-paid applicants, who inclose 5 cents with their address.

FLOUR CORN, AUSTRALIAN WHEAT, POLAND OATS, EGYPTIAN CORN, SWEET PUMPKINS, APPLE SQUASHES, EARLY LIMA BEAN, JAPAN PEA, NATIVE COFFEE, CROUDAN PEA, THOUSAND-TO-ONE BEAN, CALAVANT PEA, BURNA VISTA BEAN, LONG ISLAND WATERMELON, MEXICAN DOG, MOUNTAIN SPROUT DOG, MOUNTAIN SWEET DOG, VARIETY SWEET WILLIAM, DOG EAR SON-FLOWER, (the Floral King).

A package of all the above for fifty cents.
Send in your orders early, that they may be filed and attended to in turn. Your money will be returned when unable to fill order. The Potatoes will be sent in April, and the other seeds immediately.

Send current money, or postage stamps, and address.

[mar-31]

D. B. TOOKER,
Napoleon, Jackson Co., Mich.

New Patent Garden and CORN PLANTER.

THE above implement has been thoroughly tested and pronounced the best now in use in any part of the world. The Planter was exhibited for competition at the great trial of Agricultural Implements, at Geneva, N. Y., July 1862, and was awarded the 1st Premium of \$50 and a Diploma, and gave universal satisfaction. Last fall it was awarded the 1st premium at the World's Fair in New York. Its superiority over other planters consists in its smoothing the ground and pulverizing it before it deposits the seed. Then it deposits ashes, plaster, lime, bone dust, or any other kind of fine dry manure with the seed in any desired quantity, and at the same time covers it with fine dry earth at an equal depth. It is adapted to most all kinds of seed except potatoes. One acre of ground can be planted with it in one hour. Eight acres is an ordinary day's work for a man and horse. Where corn is planted with the planter, it can be cultivated through the season in the most perfect manner, with right management, for the price of one day's work of a man, boy and horse per acre with the CORN PLANTER.

The said implements will be furnished to order, to any person in the State of Michigan, warranted to work well, if properly managed, by the subscriber, who owns the right in the State of Michigan.

JAMES ANDREWS.

AGENTS FOR PLANTERS.

GEORGE M. ORRICK, Ypsilanti, MONROE ROGERS, Ann Arbor,
G. W. PLATT, Niles, [Creek] J. W. HOLIX, Jackson,
D. B. & G. C. BURNHAM, Battle Creek & Thomas, Kalamazoo.
Pontiac, Nov. 15. [mar]

ARE YOU SICK?



THEN you can't be cured for soon. You don't delay until your complaint is incurable, and then mourn when it is too late. Four-fifths of all the diseases which people die of, might be cured by AYER'S CATHARTIC PILLS, if taken in season. Don't go dragging through the Spring, faint, sleepless, and listless, because your blood is loaded with bile. Don't wear the headache, heartburn, and other kindred disorders, because your stomach is so full. Don't parade yourself around the world, covered with blotches, Ulcers, Sores, and all or any of the unclean diseases of the skin, because your system wants cleansing. Don't show yourself about, lean, haggard, all caved in, because your Stomach and Bowels need strengthening into healthy action. Ayer's Pills not only remove these things, but, as surely as water quenches fire, they purify the body and blood, and restore their functions into healthy activity, which you can feel as quick as they are taken. They are the one great medical wonder of this age, recognized by all who know their virtues, and many thousands know them. Take the Cherry Pectoral for a Cough, and the Pills for all derangements requiring a Purgative medicine.

Prepared by Doct. J. C. AYER, Practical and Analytical Chemist, Lowell, Mass., and sold by all Druggists and dealers in Medicine everywhere. [mar-31]

CRITTENDEN & Co Manufacturers of Carriages, Pleasure Wagons AND SLEIGHS.

KEEP constantly on hand, Light Buggies, Farmers' Wagons, and Sleighs of the most approved style, made of the best Eastern lumber.

All who are in want of any of the above articles will do well to call and examine before getting, as we are confident that the price will be satisfactory. Terms made easy and work warranted.

Brick Shop, Corner of Burdick and Water streets.
Kalamazoo, Mich. Jan. 1865. [mar-31]

EAGLE FOUNDRY. W. A. BURT, & SON,

—MANUFACTURERS OF—

STEAM ENGINES,
Mill Machinery, Iron and Brass Castings,
Screws of all kinds and sizes, and
repairing done generally.

KALAMAZOO, MICH. [ap-11]

BRAINARD & BURRIDGE,
ENGRAVERS, LITHOGRAPHERS
AND
DESIGNERS.

Herald Block, Cleveland, Ohio.

PATENT OFFICE AGENCY.

Number 4, Herald Buildings, Cleve and Ohio. Feb-11

HOLMES & COMPANY,

IMPORTERS, JOBBERS AND RETAILERS OF

STAPLE AND FANCY DRY GOODS

And Manufacturers and Dealers in
Clothing, Millinery, Visites, and Mantillas,
No. 100 and 102 Woodward Avenue.
DETROIT, MICHIGAN.
March, 1864. 12

SALMON'S PATENT GRAIN AND GRASS SEED SEPARATOR,

FOR FARMERS AND MILLERS.

Awarded the First Silver Medal at the World's Fair, New York, and First Prize at New York State Fair in 1852.

Patented July 6, 1858.

REPORT OF THE JURY OF AGRICULTURAL IMPLEMENTS AT THE WORLD'S FAIR.

TO G. R. SALMON, ELGIN, ILLINOIS.—For his Patent Grain and Grass Seed Separator, with the recommendation of being the best Practical Machine known as a Separator.—Award the Silver medal. Hon. HENRY WAGER, Chairman.

H. S. BABBITT, Secretary.

His Machine was invented expressly for Farmers and Millers, and will separate from Wheat, Cocks, Chess, Red-root Seeds and Stems, Dead Kernels, and Garlic, and the majority of Oats, and all other impurities.

It will clean Oats, Peas, Beans, Barley, Rye, Rice and Garden Seeds.

It will separate Oats from Peas, Beans and Corn, Clover from Timothy; Red-top from Clover and Timothy; Yellow Seeds from Flax, and any two seeds where there is a material difference either in size or weight.

It Town and County Rights for sale.

MANUFACTURED BY

G. W. BELL,

[ap. ff]

Ann Arbor, Mich.

THE TOLEDO NURSERY ASSOCIATION

Is on hand this Spring with a choice collection of

Fruit and Ornamental Trees & Vines.

THE ORNAMENTAL STOCK will be found very complete and desirable.

Roses of every class, and nearly all the desirable varieties, mostly on their own roots.

Choice Deciduous and Evergreen Trees and Shrubs, embracing BALDWIN PINE, SPANISH ARBOR VITAE, the various SPIRUEAS, CLIMBERS, &c. &c.

Dahlias, Verbenas, Petunias, and all the choice bedding out, and green-house plants, of the newest and best sorts, in their proper season.

Orange Orange Plants, in large quantity and at low rates.

Older Willow Cuttings, of the best sorts.

Pie Plant and Asparagus. We can supply fine Plants in quantity.

We publish a full descriptive Catalogue, also a wholesale price list for dealers. The first requires two stamps, and the latter one, to pre-pay postage. They are gratuitously distributed.

Orders may be addressed to

CHAS. E. PERIGO, PRESIDENT,

April 1, 1855.

[1]

Toledo, Ohio.

FARM FOR SALE.

THE subscriber, (being engaged at his "Landing" on the south shore of Wolf Lake, which he is at once to convert into a "Model Farm" and place of resort for "every body and his wife," and all respectable persons who can afford occasionally to spend a few hours of innocent recreation on the Lake in his splendid Sloop Boat, and other eastern amusements,) now offers his farm for sale.

Said Farm is pleasantly situated in a healthy, respectable and enterprising neighborhood, about one and a half miles from the new Railroad Depot and stone quarry at Napoleon Village, on the road to Grass Lake. Containing in all 80 acres—30 acres improved, with 10 acres in wheat, and 10 acres of marsh meadow, well ditched; the remainder in "opening timber," a convenient house, orchard, a barn, and other improvements, with 100 loads of compost manure on the premises. The farm is well watered in a good wheat soil, with at a foot of waste land, handy to market, church, school, grist-mill, saw-mill, &c., and is every way a convenient and desirable place for a young beginner with a small capital. Price \$1,200, one third in money down, the remainder on time to suit purchaser; or \$1,000 with certain reserves, payment easy, or to lease it at \$80 per year.

Also for sale several good Cows and Swine, Poland Oats, Flour Corn, Mexican wild Potatoes, and a choice selection of new and valuable field and garden seeds, of his own raising. Enquire of the subscriber on the premises, or by mail, post paid.

D. D. FOOKER.

Napoleon, Jackson Co., Mich., Feb. 22, 1855.

[ap.]

ASA BURNETT,

MANUFACTURER OF ALL KINDS OF

VEHICLES,

SUCH as Buggies, Carriages, Wagons, and improved Spring Boards. Carriage Trimming, Painting, Blacksmithing, and Repairing executed with promptness. Shop corner of Main and Ann streets, a few doors north of Maynard's store.

ANN ARBOR, MICH.

[ly-W]

Bounty Land! Bounty Land!!

THE Act of Congress passed March 3, 1855, gives 160 Acres of Land to every Officer, Soldier, or Musician in the Army, or Seaman, Mariner, Clerk or Landsman in the navy who served FOURTEEN DAYS, or who was in any Battle in any war since 1790, or their widows or minor children, embracing Officers and Soldiers of

Wayne's War! War of 1812! Black Hawk War! Patriot War! Florida War! Aroostook War! and Mexican War!

Also, Revolutionary Soldiers or their Widows.

In case where 160 acres have been received under former Acts of Congress, no more can be drawn; but those who have been allowed a warrant for 40 or 80 acres, are now entitled to a warrant for enough more to make up 160 acres.

The undersigned, after long experience in prosecuting soldiers' claims against the Government, now offers his services to all those who wish to obtain the additional Bounty land granted them under the new Act.

Apply to, or address by mail,

T. H. HARTWELL, Atty at Law,

ap3m Office in Basement of U. S. Court House, Detroit, Mich.

TO WOOL GROWERS.

WOOL COMMISSION HOUSE.

HAVING an extensive acquaintance with the Manufacturers and Wool Dealers in the Eastern States, and being satisfied that a WAREHOUSE for

STORAGE & SALE OF WOOL, IN DETROIT,

Will attract their attention, and believing that such an establishment will prove of great convenience and advantage to the Wool Growers of Michigan, I have concluded to appropriate the three extensive Lofts of my Warehouse to the

STORAGE OF WOOL,

Where each lot can be kept separate from the other, so that it can bring its TRUE VALUE.

I shall be in constant receipt of the current rates in the Eastern Cities from my friends who are in those markets, and am confident my sales will realize to the Wool Growers a handsome advance over the prices paid by those who travel as Agents for speculators in the article. No argument is necessary to show the fact that traveling expenses and two or three different commissions paid to agents and sub-agents, must be paid by the grower, or lost by the speculator in the ordinary manner of purchase.

This plan has proved very popular with the growers East, and no reason exists why the Farmers of Michigan should not be pleased with an arrangement which brings them within only one remove from the consumer. My charges will be uniform and reasonable, and so trivial in proportion to the advantages, as to be no objection; my object is to establish a

Permanent Wool Warehouse,

and if constant attention to sales and prompt remittances will promote my success, I am confident the result will realize my hopes. Soliciting your consignments and co-operation—pledging you my best personal attention to your interest, and referring you to either of the gentlemen whose names and residence are herewith.

I am, very respectfully, Yours,

WALTER CHESTER,

On the River, between First and Second Sts.

REFERENCES.

Geo. W. Bissell,
H. P. Baldwin,
Z. Chandler,
J. C. Holmes,
H. H. Brown,
Jno. Owen,
P. Thurber,

Detroit.

Geo. E. Pomeroy, Clinton.
J. Satterthwaite, Tecumseh.
T. Farnham & Co.,

Buffalo.

A. Rumsey,
H. Daw & Son,
Pratt & Co.,

J. Buck & Co., Adrian.

Detroit, April, 1855.

W. N. Choat Jackson.
Follett & Conklin, Ypsilanti.
W. S. Maynard, Ann Arbor.
D. S. Walbridge, Kalamazoo.
George W. Lee, Howell.
Thomas Moseley, Union City.
C. E. Dewar, Michigan City.
D. Lyon Thorp, Ocassee.
Samuel Seiden, South Jackson.
A. J. Ross,
H. B. Morris & Bro., Pontiac.
E. F. Wade, Corunna.
H. A. Lacy, Marshall.

[ap.3]

S. GUITERMAN & BROTHER,

WHOLESALE AND RETAIL DEALERS IN

READY MADE CLOTHING,

IMPORTERS OF

Cloths, Cassimeres, and Vestings,

KEEP constantly on hand a large assortment of Gents' garments, made up under their own supervision, which they offer for sale cheaper than any other Store in Michigan. It will be an object for any man who is in want of Clothing to give them a call.

Work Done to Order.

No. 5, New Block, Ann Arbor, Michigan.

Branch in FONTIAC, conducted by Martin Guiterman.

" BATTLE CREEK, conducted by Morris Kohn.

" WHITE PIGEON, conducted by Lewis Goodman.

Ann Arbor, April, 1855.

[W]

VALUABLE INVENTION! HIGHLY IMPORTANT TO FARMERS.

C. H. DANA'S Premium Hand Corn Planter.

THE attention of Farmers is respectfully called to this novel Machine, as being decidedly the best thing of the kind yet invented. It is remarkable for its cheapness and durability, for the simplicity and ingenuity of its construction, and for the wonderful accuracy and dispatch with which it does its work in every variety of soil. Its weight is about four and one half pounds. By attaching them to a light horizontal bar, the operator can carry two of them and plant two rows at a time. It supersedes the Horse Planter in all the qualities above named, and what is of still greater importance, it plants the field IN CHECK.

This Machine was tested in the season of 1854, by numerous Farmers in the Eastern States, who unite in giving it their decided preference over every thing of the kind ever introduced. It has been exhibited at several Agricultural Fairs, and has always, without exception,

Been Awarded the Highest Premium!

It is now being introduced into nearly every State of the Union, and is every where meeting with the most unprecedented success. From the many flattering encomiums bestowed upon the Planter, those who are selected from gentle can occupy the highest rank in their respective communities.

This Machine is now being manufactured at Ypsilanti, Michigan, upon an extensive scale, and will soon be offered for sale in all the Corn-growing sections of the State.

PRICE ONLY THREE DOLLARS!

Ypsilanti, April, 1855.

A. KINNE.

TESTIMONIALS.

From His Excellency, NATHANIEL B. BAKER, Governor of New Hampshire.

Concord, N. H., January 10, 1855. This certifies that the Corn Planter invented by Charles H. Dana, of Lebanon, and known as "Dana's Corn Planter," was exhibited at the State Fair, 1854, at Keene, in this State, and received the highest premium awarded by the Society to that class of implements. I have seen the Planter in use on a variety of soils, executing its work under all circumstances with admirable accuracy and dispatch; and can confidently recommend it as decidedly the best implement of the kind within my knowledge. (Signed) N. B. BAKER,

Pres't of N. H. State Ag'l Society.

From the Secretary of the N. H. State Agricultural Society.

This certifies that the Corn Planter presented by Charles H. Dana, of Lebanon, and known as Dana's Corn Planter, was exhibited at the New Hampshire State Fair at Manchester in 1853, and received the highest award for that class of implements. It was also exhibited at the Fair of 1854, at Keene, and was awarded the first premium offered by the Society. I have seen this Planter in use on various kinds of soil, and can recommend it as the best as well as the cheapest implement of the kind within my knowledge. (Signed) JAMES O. ADAMS,

Sec'y N. H. State Ag'l Society.

From the President of the Connecticut River Valley Agricultural Society.

This certifies that at the last annual meeting of the Connecticut River Valley Agricultural Society, the Hand Corn Planter, invented by Charles H. Dana, and patented Sept. 5, 1854, was presented for a premium in connection with one or two other Planter—some I believe, called the Wakefield Corn Planter—and after a full and careful examination of the Machines by the Committee, a premium was unanimously awarded to Dana's Planter; it being, in their estimation, superior not only to all implements of the kind exhibited on that occasion, but also decidedly superior to any Planter ever used in the country. I regard it as a very important Agricultural implement, and am happy to learn that it is being so universally adopted by our Farmers. (Signed) ASABEL SMITH,

Pres't Conn. River Valley Ag'l Soc'y.

W. S. LUNT,
BREEDER OF
SUPPORK & BEEF PIGS
Fancy Fowls, Lop-Eared Rabbits, &c.,
FINDLAY, HANCOCK CO., OHIO.

"We take pleasure in saying to those unacquainted with Mr. LUNT, that he is a most excellent and honorable gentleman, and purchasers can rely upon any statement which he may make in reference to his stock."
[Ed. Ohio Farmer, August, 1854.]

This certifies that we are personally acquainted with Mr. LUNT, and cheerfully recommend him to the consideration of those who desire to purchase improved stock.
Hon. H. D. CORT, Hon. P. CARLISLE,
Charles W. O'NEAL, Esq., Dr. W. H. [unclear]
[Mar.-2.]

THE BIRMINGHAM OVELTY IRON WORKS.

A. SMITH & SON,

MANUFACTURE and keep constantly on hand and for sale, the very best variety of FARMING IMPLEMENTS AND MACHINERY, of all kinds. The following are a few of the articles manufactured:

The Michigan Sub-Soil, or Jointer Plow,—

Price from \$12 to \$16.

Starbuck's, and other kinds of Plows, at various prices.

Corn Planters, the working parts made of cast and wrought iron, of the best pattern. The corn is covered (with these machines) by two small mould-boards, and can be covered at any depth required. Price \$14.

Cast Iron Field Rollers, from 4 to 7 feet long. Price from \$30 to \$50.

Stump Screws, \$11 per screw. One and two Horse Powers, with Tumbling Rod and Coupling. Price \$43.

Cross-Cut Saw Mills, for sawing Wood, Shingle Bolts, &c., with Saw to suit, \$40. Where we sell Horse Power and Mill together our price is \$80. These Mills are capable of sawing from 20 to 35 cords of stove wood per day. The saw runs on ways, and is raised out of the log by means of a lever, with ease, so there is no necessity of stopping the team to raise or lower the saw. There is also a joint in the frame of these Mills, so that they can be taken apart to be moved, which makes them handy; and also a part can be used as a Jack for driving a Thresher, Butz Saw, and other Machinery, by means of a belt over a fly wheel.

Apple Grinders, and Corn Shellers, for hand or horse power, \$21.

Cider Press, with two screws, and capable of holding pomace for one barrel of cider. Price \$12. They are a durable machine, and are capable of making from six to ten barrels of cider per day, with two men and one horse. If a horse is used ten barrels is an easy day's work; two men can make six barrels per day. They are also the best kind of a Corn Sheller; they are capable of shelling from one hundred and fifty to two hundred bushels of corn per day. The cob is separated from the corn, and shells perfectly clean.

We are prepared to make all kinds of CASTINGS, do all kinds of Iron Turning and Finishing, and Job Work of all description.

All orders addressed to A. SMITH & SON, Birmingham, Michigan, will meet with prompt attention.

Birmingham, April, 1855. [6m] A. SMITH & SON.

Steel Cultivator Teeth.

THE subscriber having purchased the exclusive right of manufacturing and vending **D. B. ROGERS' Improved Steel Cultivator Teeth**, throughout the north half of the State of Indiana and all the State of Michigan, except the counties of Oakland, Lapeer, Genesee, Calhoun, Kalamazoo, and Hillsdale, now offers to supply his district with said Teeth, made of the best quality of spring steel, and in the latest improved shape.

These Teeth are too well known to need any certificate of their usefulness. They have taken the first premium at every State and County Fair wherever exhibited.

For sale in every principal city and village throughout the above named district.

The subscriber has also purchased the exclusive right of manufacturing and vending **D. B. ROGERS' IMPROVEMENT IN THE WHEEL CULTIVATOR**, throughout most of the States of Michigan and Indiana. At the Michigan State Fairs in 1853 and 1854, he exhibited one of these Machines, filled with steel teeth, and received the first premium and a diploma. This Machine, filled with Rogers' improved steel teeth, is considered by all farmers who have used them, to be the best Wheel Cultivator in use, not only for preparing summer fallows and putting in grain, but for the cultivation of corn when planted in drills.

No farmer will dispense with the use of the above named farming implements who has any knowledge of their usefulness.

All orders for Wheel Cultivators, or Cultivator Teeth, filled on short notice.

CAUTION.—All persons are prohibited the use of these Teeth and Machines, in said district, unless purchased of the subscriber or his duly authorized Agents. Address,

April 1, 1855. T. A. FLOWER,
MONTIC, MICH.

REALLY WORTH REMEMBERING!

THAT THE

MICHIGAN BOOT & SHOE STORE!

STILL continues to hold forth GREAT INDUCEMENTS for all those wishing to supply themselves or families with a first rate article of

BOOTS, SHOES AND GAITERS.

We have recently added an immense Stock of New and Desirable Goods to our former stock, which, with goods from our

OWN MANUFACTORY, will enable us to offer our patrons an UNEQUALLED assortment of Boots and Shoes of

ANY KIND OR QUALITY

to select from, and we are determined that they SHALL BE SOLD CHEAPLY.

230 Jefferson Ave., near Bates St., DETROIT. June-17

FOR THE HARVEST OF 1855.

J. H. MANNY'S PATENT ADJUSTABLE REAPER AND MOWER COMBINED! AND SINGLE MOWER.

Secured to John H. Manny by Nine Patents in the United States! Also Patented in Europe.

Manufactured by MANNY & Co., Rockford, Illinois.

These valuable Machines are constantly being manufactured. A large number are being made for the coming Harvest. Over TWO THOUSAND were constructed during the past season, and used with ENTIRE SUCCESS, yet the demand was not half supplied. FORTY FIRST CLASS PREMIUMS have been awarded to Mr Manny for the superiority of his Machines over all others, in the frequent trials it has had with them, including every Machine that has any claim to reputation.

A WARRANTY is given to each purchaser that the Machine is well built, and of good materials; and that it will Mow as well as can be done with the Scythe, and Reap as well as can be done with the Cradle. The Machine is drawn by two horses and managed by one person for Mowing, and two persons for Reaping; and is also warranted to cut from ten to fifteen acres per day.

THE NINE PATENTS of John H. Manny for Reaping and Mowing Machines embrace Adjustability, the Knives, Guard Fingers, Dividers, Arrangement of Wheels, of Platforms, Trucks, Levers, Braces, Frame Work, Gathering Wings, Oblique Platform, Joints, Positions for Attendants, etc., etc.—all these being exceedingly valuable features, and in most successful operation.

The only successful and perfect combination of Reaper and Mower in the World, as well as being the best Single Machine for either purpose.

All the various kinds of Reapers and Mowers, have endeavored to compete with this Machine; the result in every instance has shown its superiority, and though the Self-Raker came up with boasted ingenuity and boasted labor-saving advantages, yet it is unable to win

A PRIZE OF FIFTEEN HUNDRED DOLLARS!

But is decided by an honorable Committee (AS A REAPER ONLY,) to be inferior to the best hand-raking machine; to say nothing about their additional price, nor their not being adapted to mowing. But their complication of machinery, wasting the grain, and irregularity of the gavel, far more than neutralizes their claims to labor-saving. While

MANNY'S MACHINE

Excels all others in simplicity of construction, in facility of management, in lightness of draught, (requiring only two horses,) in having no side draught, in its adjustability to uneven ground, and in being readily adjustable to any height from the ground when reaping, by means of a LEVER extending to the driver's seat, and under his control. It also excels every other implement in cutting lodged or tangled grain or grass, whether wet or dry, without clogging. It will cut flax close to the ground, or gather the seed, and will also gather timothy and clover seed. TWO KNIVES—one a sickle, the other a smooth edge—are furnished with each machine, either of which may be used as required. THE COMBINED MACHINE is converted from a Reaper to a Mower, and vice versa, by simply removing or inserting a loose platform, which may be done in less than one minute.

Numerous certificates, recommendations, and testimonials to the great value of Manny's Machine, have been received from all parts of the country, and are published, together with a large amount of other information, in a pamphlet, which will promptly be sent by mail to all applicants.

Terms same as heretofore.—Machines delivered where ordered, with transportation added.

For Two Horse Machine, of about 5 feet cut, Cash price,	\$125.00	For Four Horse Machine, of about 6 feet cut, Cash price,	\$135.00
Half Cash and the other half on 1st of December,	\$235.00	Half Cash and the other half on the 1st of December,	\$145.00

Letters should be sent in season to secure machines. To meet the wants of those who have on hand certain kinds of Reapers that will not Mow, or who may only want a MOWING MACHINE, we will furnish our machine adapted *simply and exclusively for Mowing*, at a Cash price of \$110; half Cash, and the other half on the 1st of December following, \$120. Dealers supplied by wholesale. Farmers within reach of Wadsworth's Grove, Ill., can be supplied by P. MANNY, of that place.

ROCKFORD, ILL., March, 1855.

MANNY & Co.

PREMIUMS AWARDED THIS MACHINE AND MEDAL AT THE WORLD'S FAIR!

Special Notice is hereby given to C. H. McCORMICK that I shall hold him accountable for all his infringements of my rights. He says in the Albany Cultivator, of December, 1852, "Satisfied from the experience of the past harvest of the IMPOSIBILITY of constructing the same Machine, both for Mowing and Reaping to the best advantage, a SEPARATE Mowing apparatus for the next harvest will be sold with my Reaper." Now, my dear Sir, make your *separate Mowing apparatus*, but do not infringe my claims, as I shall hold you strictly accountable for so doing.

[Mar. 6m]

JOHN H. MANNY.

VALUABLE INVENTION!

HIGHLY IMPORTANT TO FARMERS.

C. H. DANA'S Premium Hand Corn Planter.

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This Machine was tested in the season of 1854, by numerous Farmers in the Eastern States, who unite in giving it their decided preference over every thing of the kind ever introduced. It has been exhibited at several Agricultural Fairs, and has always, without exception,

Been Awarded the Highest Premium!

It is now being introduced into nearly every State of the Union, and is every where meeting with the most unprecedented success. From the many flattering encomiums bestowed upon the Planter, those who are selected from gentlemen occupying the highest positions in their respective communities.

This Machine is now being manufactured at Ypsilanti, Michigan, upon an extensive scale, and will soon be offered for sale in all the Corn-growing sections of the State.

PRICE ONLY THREE DOLLARS!

Ypsilanti, April, 1855.

A. KINNE.

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W. S. LUNT,
BREEDER OF
SUPPOLD & BERRY PIGS
Fancy Fowls, Lop-Eared Rabbits, &c.,
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This certifies that we are personally acquainted with Mr. LUNT, and cheerfully recommend him to the confidence of those who desire to purchase his improved stock.

Hon. H. P. GORTY, Hon. F. CARLIS, C. J. (1855)
CHARLES W. O'NEAL, Esq., Dr. W. H. (1854)
[Mar-24]

THE BIRMINGHAM OVELTY IRON WORKS.

A. SMITH & SON,

MANUFACTURE and keep constantly on hand and for sale, the very best variety of FARMING IMPLEMENTS AND MACHINERY, of all kinds. The following are a few of the articles manufactured:

The Michigan Sub-Soil, or Jointer Plow,—Price from \$12 to \$16.

Starbuck's, and other kinds of Plows, at various prices.

Corn Planters, the working parts made of cast and wrought iron, of the best pattern. The corn is covered (with these machines) by two small mould-boards, and can be covered at any depth required. Price \$14.

Cast Iron Field Rollers, from 4 to 7 feet long. Price from \$30 to \$50.

Stump Screws, \$11 per screw. One and two Horse Powers, with Tumbling Rod and Coupling. Price \$43.

Cross-Cut Saw Mills, for sawing Wood, Shingle Bolts, &c., with Saw to suit, \$40. Where we sell Horse Power and Mill together our price is \$80. These Mills are capable of sawing from 20 to 35 cords of stove wood per day. The saw runs on ways, and is raised out of the log by means of a lever, with ease, so there is no necessity of stopping the team to raise or lower the saw. There is also a joint in the frame of these Mills, so that they can be taken apart to be moved, which makes them handy; and also a part can be used as a Jack for driving a Thresher, Buzz Saw, and other Machinery, by means of a belt over a fly wheel.

Apple Grinders, and Corn Shellers, for hand or horse power, \$21.

Cider Press, with two screws, and capable of holding pomace for one barrel of cider. Price \$12. They are a durable machine, and are capable of making from six to ten barrels of cider per day, with two men and one horse. If a horse is used ten barrels is an easy day's work; two men can make six barrels per day. They are also the best kind of a Corn Sheller; they are capable of shelling from one hundred and fifty to two hundred bushels of corn per day. The cob is separated from the corn, and shells perfectly clean.

We are prepared to make all kinds of CASTINGS, do all kinds of Iron-Burning and Finishing, and Job Work of all description.

All orders addressed to A. SMITH & SON, Birmingham, Michigan, will meet with prompt attention.

Birmingham, April, 1855. [6m] A. SMITH & SON.

Steel Cultivator Teeth.

THE subscriber having purchased the exclusive right of manufacturing and vending D. B. ROGERS' Improved Steel Cultivator Teeth, throughout the north half of the State of Indiana and all the State of Michigan, except the counties of Oakland, Lapeer, Genesee, Calhoun, Kalamazoo, and Hillsdale, now offers to supply his district with said Teeth, made of the best quality of spring steel, and in the latest improved shape.

These Teeth are too well known to need any certificates of their usefulness. They have taken the first premium at every State and County Fair wherever exhibited.

For sale in every principal city and village throughout the above named district.

The subscriber has also purchased the exclusive right of manufacturing and vending D. B. ROGERS' IMPROVEMENT IN THE WHEEL CULTIVATOR, throughout most of the States of Michigan and Indiana. At the Michigan State Fair in 1853 and 1854, he exhibited one of these Machines, fitted with steel teeth, and received the first premium and a diploma. This Machine, fitted with Rogers' Improved steel teeth, is considered by all farmers who have used them, to be the best Wheel Cultivator in use, not only for preparing summer fallows and putting in grain, but for the cultivation of corn when planted in drills.

No farmer will dispute with the use of the above named farming implements who has any knowledge of their usefulness.

All orders for Wheel Cultivators, or Cultivator Teeth, filled on short notice.

CAUTION.—All persons are prohibited the use of these Teeth and Machines, in said district, unless purchased of the subscriber or his duly authorized Agents. Address,

April 1, 1855. T. A. FLOWER,

ONTIAC, MICH.

REALLY WORTH REMEMBERING!

THAT THE

MICHIGAN BOOT & SHOE STORE!

STILL continues to hold forth GREAT INDUCEMENTS for all those wishing to supply themselves or families with a first rate article of

BOOTS, SHOES AND GAITERS.

We have recently added an immense Stock of New and Desirable Goods to our former stock, which, with goods from our

OWN MANUFACTORY, will enable us to offer our patrons an UNEQUALLED assortment of Boots and Shoes of

ANY KIND OR QUALITY

to select from, and we are determined that they SHALL BE SOLD CHEAPLY by

SWIFT & SEYMOUR,

200 Jefferson ave., near Bates-st., Detroit. June-17

FOR THE HARVEST OF 1855.

J. H. MANNY'S PATENT ADJUSTABLE REAPER AND MOWER COMBINED! AND SINGLE MOWER.

Secured to John H. Manny by Nine Patents in the United States! Also Patented in Europe.

Manufactured by MANNY & Co., Rockford, Illinois.

These valuable Machines are constantly being manufactured. A large number are being made for the coming Harvest. Over TWO THOUSAND were constructed during the past season, and used with ENTIRE SUCCESS, yet the demand was not half supplied. FORTY FIRST CLASS PREMIUMS have been awarded to Mr Manny for the superiority of his Machines over all others, in the frequent trials it has had with them, including every Machine that has any claim to reputation.

A WARRANTY is given to each purchaser that the Machine is well built, and of good materials; and that it will Mow as well as can be done with the Scythe, and Reap as well as can be done with the Cradle. The Machine is drawn by two horses and managed by one person for Mowing, and two persons for Reaping; and is also warranted to cut from ten to fifteen acres per day.

THE NINE PATENTS of John H. Manny for Reaping and Mowing Machines embrace Adjustability, the Knives, Guard Fingers, Dividers, Arrangement of Wheels, of Platforms, Trucks, Levers, Braces, Frame Work, Gathering Wings, Oblique Platform, Joints, Positions for Attendants, etc., etc.—all these being exceedingly valuable features, and in most successful operation.

The only successful and perfect combination of Reaper and Mower in the World, as well as being the best Single Machine for either purpose.

All the various kinds of Reapers and Mowers, have endeavored to compete with this Machine; the result in every instance has shown its superiority, and though the Self-Raker came up with boasted ingenuity and boasted labor-saving advantages, yet it is unable to win.

A PRIZE OF FIFTEEN HUNDRED DOLLARS!

But is decided by an honorable Committee (AS A REAPER ONLY,) to be inferior to the best hand-raking machine; to say nothing about their additional price, nor their not being adapted to mowing. But their complication of machinery, wasting the grain, and irregularity of the gavel, far more than neutralizes their claims to labor-saving. While

MANNY'S MACHINE

Excels all others in simplicity of construction, in facility of management, in lightness of draught, (requiring only two horses,) in having no side draught, in its adjustability to uneven ground, and in being readily adjustable to any height from the ground when reaping, by means of a LEVER extending to the driver's seat, and under his control. It also excels every other implement in cutting lodged or tangled grain or grass, whether wet or dry, without clogging. It will cut fax close to the ground, or gather the seed, and will also gather timothy and clover seed. TWO KNIVES—one a sickle, the other a smooth edge—are furnished with each machine, either of which may be used as required. THE COMBINED MACHINE is converted from a Reaper to a Mower, and vice versa, by simply removing or inserting a loose platform, which may be done in less than one minute.

Numerous certificates, recommendations, and testimonials to the great value of Manny's Machine, have been received from all parts of the country, and are published, together with a large amount of other information, in a pamphlet, which will promptly be sent by mail to all applicants.

Terms same as heretofore.—Machines delivered where ordered, with transportation added.

For Two Horse Machine, of about 5 feet cut, cash price,	\$125.00	For Four Horse Machine, of about 6 feet cut, cash price,	\$135.00
Half Cash and the other half on 1st of December;	\$235.00	Half Cash and the other half on the 1st of December,	\$145.00

Orders should be sent in season to secure machines. To meet the wants of those who have on hand certain kinds of Reapers that will not Mow, or who may only want a MOWING MACHINE, we will furnish our machine adapted simply and exclusively for Mowing, at a Cash price of \$110; half Cash, and the other half on the 1st of December following, \$120. Dealers supplied by wholesale. Farmers within reach of Wadman's Grove, Ill., can be supplied by P. MANNY, of that place.

ROCKFORD, ILL., March, 1855.

MANNY & Co.

PREMIUMS AWARDED THIS MACHINE AND MEDAL AT THE WORLD'S FAIR!

Special Notice is hereby given to C. H. McCORMICK that I shall hold him accountable for all his infringements of my rights. He says in the Albany Cultivator, of December, 1852, "Satisfied from the experience on the past harvest of the IMPOS- SIBILITY of constructing the same Machine, both for Mowing and Reaping to the best advantage, a SEPARATE Mowing apparatus for the next harvest will be sold with my Reaper." Now, my dear Sir, make your separate Mowing apparatus, but do not infringe my claims, as I shall hold you strictly accountable for so doing.

[Mar. 5m]

JOHN H. MANNY.

ENGLISH CATTLE

Imported on Commission by Thomas Betts & Brothers,
BISHOPS STORTFORD, ENGLAND.

BEING much the cheapest and the only way of obtaining Stock direct from the Breeder, which will give gentlemen an opportunity of obtaining the best stock without having to pay an exorbitant price for them in America, the firm having had thirty years experience, they feel confident of giving satisfaction both as regards price and selecting the Stock from the best Herds in England.

**Thorough Bred Horses,
Short Horned Cattle,
Devons,
Herefords,
Ayrshire,**

*Alderney Cows from the Island
of Jersey and Guernsey,
Pure South Down Sheep,
Hampshire do.
Cotswold, do.
Leicester*

Suffolk Pigs,
Essex
Berkshire
Merino Sheep from Spain,
Mules, do.

MESSRS. BETTS & BROTHERS have appointed one of the most experienced men in England entirely for furnishing
THOROUGH BRED HORSES,
 and they have also an agent in Spain for purchasing Mules, Merino Sheep, etc.

MESSE^{RS}. BETTS & BROTHERS have purchased a valuable Patent which will prevent accidents occurring to Cattle, coming across the Atlantic. They can

NOW BE SAFELY IMPORTED ANY TIME DURING THE YEAR.

The Cattle will be insured from Liverpool to New York when desired, by charging a small per centage.

A Steamer will leave Liverpool with Cattle about the first of every month. The Stock will be delivered at New York in about six weeks from the time the order is given in America.

Orders received, or for circulars containing all information, apply to Messrs. THOS. BURTS & BRO., or J. M. MILLER, 51, Maiden Lane, New York City, who is authorized to act as our Agents.

AGENTS FOR MESSRS. THOS. BETTS & BROTHER, IN AMERICA.

J. M. MILLER,	51, Maiden Lane, NEW YORK CITY,
W. EVANS, Sec. of the Board of Agricul.,	MONTREAL, C. E.
G. B. BUCKLAND,	do do TORONTO, C. E.
C. L. FLINT,	Sec of the State Agr'l Soc., BOSTON, MASS.
O. ADAMS,	do do New Hampshire.
— DENNIS,	do do RICHMOND, VA.

February, 1855. (tf)

J. L. STEPHENS,	Sec. Ag'l	ety, Boc	VILLE, Masshur.
J. M. SHAFFER,	o	o	AIRFIELD, I. wa.
— WILLIAMS,	do of the Co.	ty Soci	PARIS, Ky.
— BROWN,	do	do	CLEVELAND, O.
— CLARKENTS,	do	do	HILAD, Penn.
— HAMPTON,	do	do	USTIN, Texas.

LUMBER.

EDMUNDS & NORTH Manufacturers and dealers in all kinds of Pine, Whitewood and Ash Lumber, Planed and Grooved Flooring, Planed and Jointed Ceiling Pine and Board Ceiling, Pine Boards and Bents for Gothic Roofs and Eaves, Pine Shingles, Lath and Pickets. D. R. P. Mich.

CHARLES THORNTON

MANUFACTURER and dealer in Hats, Caps, Furs, Gentlemen's Furnishing Goods, Stocks, Cravats, Ties, Collars, Handkerchiefs, Gloves, Socks, Suspenders, Canes, and Umbrellas, and all articles usually kept at hat stores. Cash paid for Furs. No. 27, Phoenix Block, Main St., Ann Arbor, Mich. J. C. J.

WM. WAGNER.

MANUFACTURER and dealer in Ready Made Clothing. His assortment will always be found complete. Also, an assortment of Cloth, Cambrics, Vestings, and Gentlemen's Furnishing Goods. Custom Work and Cutting done to order. No. 11, Phoenix Block, Main street, Ann Arbor, Mich. j-1

T. A. HAVILAND.

MANUFACTURER and dealer in Wheat Drills, Thrashing Machines, Clover Machines, and Straw Cutters. Also, Child's Wheat Cleaner, for millers. Blacksmithing carried on in all its branches. All articles warranted to give entire satisfaction.

Ann Arbor, Lower Town, Michigan. Jett

C. B. HUTCHINSON'S
STAVE MACHINE

THIS Machine was awarded the highest reward—a Silver Medal at the Crystal Palace.

The subscriber is the authorized agent of the Patentee, and offers for sale individual, town and county rights in the unsold territory of the State of Michigan. All letters post-paid will receive prompt attention.

A machine may be seen in operation at Rawsonville, 4 1/2 miles southeast of Ypsilanti.

DR. C. B. PORTER & BROTHER.

DENTISTS

WE are permanently located in the city of Ann Arbor, and may be found at all times, ready to perform any operation in dentistry, with neatness and dispatch. Teeth cleaned, and filled with pure gold as an arrest disease, and preserve their usefulness.

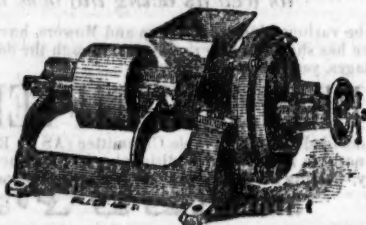
ARTIFICIAL TESTS

Inserted upon pure gold and platinum, unequalled for beauty usefulness, and durability.

CALVIN ELI: S.

DEALER in Clocks, Watches, Jewelry, Silver and Plated Ware, Musical Instruments, Cutlery and Fancy Goods. His assortment will always be found complete, and sold for cash as cheap as at any establishment west of New York. Clocks, Watches and Jewelry of every description, neatly repaired and warranted. Sign of Big Watch, 27 Phoenix Block, Main St., Ann Arbor, Mich. Jely

TO FARMERS, MILLERS & LUMBERMEN.



CHARLES ROSS
PATENT CONICAL

BURR-STONE MILLS.

ARE the most perfect Grinding Mills ever devised for a pulley.
A. Either for Farmers' use, by Horse Power, or for Flouring and
grinding middlings and other stuffs in large Flouring mills, they
excel all other kinds of mills, giving a finer yield and a better
flour, having no oscillating motion, and easily kept in good case; and
are the only mill well adapted to the unsteady motion of saw-
mills, for meal, Graham flour, or feed grinding. The factory prices
are \$75, \$100, \$140, \$175, \$200, and \$300, and freight to the place
of destination. For sale by WALTER CROSBY & CO., on the
dock, and
JOS. P. REID & CO.,
[March, 1. 1855.] General Agent, Detroit, Michigan.

SETH A. BUSHNELL.

BREEDER OF

DURHAM CATTLE

MALTESE JACKS AND JENNETS.

SOUTHDOWN SHEEP

(ma) **HARTFORD**, Trumbull Co., Ohio